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SOCIAL SCIENCE ABSTRACTS

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THE NIKE PARAPET ONCE MORE

A PRELIMINARY study of the sculptured parapet of the Nike bastion of the Acropolis,¹ in preparation for my monograph on *The Propylaea*, was undertaken in the summer of 1925, in the hope of eliciting criticism which would enable me to perfect the final publication.² A brief résumé of my conclusions is repeated by Picard in the magnificent volume of Boissonnas photographs of the Propylaea and vicinity.³ The patiently awaited criticism finally comes from Carpenter's able pen.⁴ And while the definitive publication must still be deferred for inclusion in the monograph, it would seem advisable to summarize at this time the results already attained.

In the preliminary publication, I laid down the principle that instead of basing our conclusions upon composition alone, the method hitherto prevailing, we must take into consideration also the neglected elements of construction and style. Of these three, the most important is construction, since without definite fixed landmarks, which can be determined solely by consideration of the technical structure, all restorations based on composition and style rest on empty air. The neglect of construction having been the basic error of previous studies, it was upon this field that I concentrated my attention. Second in importance seemed to be composition, which must be inferred from the fixed points determined by construction, and yields clues by which other fragments lacking technical marks can be placed. At this point it became apparent that the arrangement was more or less a counterpart of the frieze of the Parthenon: both flanks, north and south, displayed a continuous movement toward the main front, as if one were looking at the same scene from opposite sides of the bastion; while on the main front, the west, the composition was balanced and culminated at the centre.⁵ Third in importance I placed style; for even if differences of execution could be distinguished, it was *a priori* quite uncertain how the work might have been distributed among the various sculptors. Lack of time prevented me from investigating this last element on the originals; but from photographs at varying scales I believed that I could detect the work of five or possibly

¹ *A.J.A.*, 1926, pp. 1-31, pl. I.

² The bibliography of the earlier studies is cited in *A.J.A.*, 1926, p. 1, n. 3.

³ Picard, *L'Acropole: (II) L'Enceinte, L'Entrée, . . . Les Propylées* (Paris, 1929), pp. 25-29, pls. 42-48.

⁴ *A.J.A.*, 1929, pp. 467-483, pl. VII. [See now also Carpenter, *The Sculpture of the Nike Temple Parapet* (Cambridge, 1929).]

⁵ *A.J.A.*, 1926, p. 21; Carpenter makes the same comparison, *A.J.A.*, 1929, p. 483.

six sculptors, the distribution of the styles bearing some relationship to the arrangement as based on the two other kinds of evidence. On account of the uncertainty of such observations, however, I refrained from attempting to locate exactly any of the remaining fragments purely on the basis of style. In sum, the distribution which seemed to result from this investigation was as follows:¹

Based on	East	North	West	South
(1) Construction alone	GG, B	B, A, Y, BB*	G, E, P*, W, AA, DD, LL, C	C, O, V
(2a) Composition—Construction		H+U	HH	M, P, S, X, KK
(2b) Composition alone	Z*, CC	T*		L, R
(4) Unlocated	D, F, J, K, N, Q, EE, FF, II, JJ, MM, NN, OO, PP, QQ, RR, (SS). ²			

The third aspect of the study, the question of style, has now been resolved by the discriminating judgment of Rhys Carpenter. Disregarding, in order to avoid biased judgment, all findings as to construction and composition, and restricting himself to the character of the isolated fragments themselves, he finds in them the mannerisms of six different executants, as follows:

Masters	"A"	"B"	"C"	"D"	"E"	"F"
(3a) Style alone	A ₁ , B, L, GG	A _r , H, J, R, U, NN	D, G, P*, DD, FF, JJ, MM,	C ₁ , E, N, Q, X, HH	Cr, M, O, V	K, P, S, KK
			QQ, RR			
(3b) Other reasons	F, Y, Z*, BB*, CC	W, AA		LL		T*
(4) Unsigned	EE, II, OO, PP, (SS).					

As Carpenter observed, the styles of Masters "A" and "B" coincide almost perfectly with the pieces which on technical grounds (1 and 2a) I had assigned to the east and north (the stylistic factor adding *L* and *NN* to my list, and probably also *F*, though I doubt *J* and *R*). The styles of Masters "C" and "D", furthermore, coincide with the pieces which on these grounds I had assigned to the west front (adding *D*, *N*, *X*, *JJ*, *MM*, *QQ*, *RR*, to my list, though I doubt *Q*). And the styles of Masters "E" and "F" coincide with the pieces which on these grounds I had assigned to the south flank (adding *K* to my list, but eliminating *X*). The result of such close

¹ In designating the fragments I continue to employ the traditional system of letters applied by Kekulé and Heberdey, instead of the numbers pencilled on the marbles in accordance with their present (let us hope temporary) locations in the Museum, not without some confusion (no. 14 appears on 17, no. 20 appears on 23). The identity of the fragments will become apparent upon reference to the articles of 1926 and 1929.

² The hitherto unconsidered fragment (SS) is the wing fragment no. 1266 in the Acropolis Museum, which Casson now suggests as a piece of the parapet (Paton-Stevens, *Erechtheum*, p. 271, fig. 168). A portion of a torso (Yorke, *J.H.S.*, 1892/3, p. 279) is now apparently missing from the Acropolis Museum (Casson, *Catalogue*, p. 174, no. 983), but may possibly have been incorporated in a restoration.

agreement of the two investigations is doubly satisfactory, inasmuch as the grouping by styles goes, in general, to confirm my distribution on grounds of construction and composition; while conversely my distribution guarantees the accuracy of Carpenter's judgment of stylistic detail. Thus the stylistic evidence, as distributed on the basis of construction, now attains a level of scientific accuracy.

We turn, therefore, to the differences between my original restoration and Carpenter's revision of it, considering the four sides of the parapet one by one.

On the east, beside the small stairway, the two slabs (I-II) with the four Nikes (1-4) remain admittedly unchanged.¹

On the north, with eight slabs (II-IX) and fourteen human figures (5-18),² the arrangement is unchanged,³ and so are the exact locations of pieces *B*, *A*, *H+U*, and *BB*+CC*; the small fragment *Z** assigned by me to slab IX because no other position seemed available, and likewise accepted by Carpenter, I now prefer to eliminate because the trophy seems to have been rather too far from the joint as compared with the corresponding trophy at the west end of the south flank (*C*). To slab VII we welcome the addition of *NN* on stylistic grounds; but the combination of *Y* in the same slab is contrary to my measurements. Also the location of the small piece *F* in the right half of slab VIII (17) seems improbable; the Nike is moving too rapidly toward the right to be immediately adjacent to the trophy on slab IX, and so, if really by Master "B," is preferably a secondary figure on the left half of slab VIII (16). As for the combination of *J* and *R* on slab VI, these seem stylistically unsuited to the north flank, and, as will be shown below, must be rejected. On the other hand, fragment *L*, which I had assigned to the south flank merely on grounds of composition, was recognized by Carpenter as of the style of Master "A" and so belonging to the north flank, and, furthermore, to the left half thereof, between *B* and *A*. Since the Nike *L*, though bearing a Persian quiver, faces right and so is hardly to be associated with the Persian trophy on *B*, we are at once confronted with the necessity of introducing a fourth trophy scene on the north flank; and, with *Y* facing left on slab III (7), *L* can only be placed on slab IV (8) facing right.

Thus instead of three trophies on this north flank, on slabs II, VII, and IX, each of a different kind as I had formerly suggested, we must now accept Carpenter's symmetrical composition with four

¹ Cf. *A.J.A.*, 1926, p. 15, fig. 8.

² For the numbering of the slabs and human figures, see *A.J.A.*, 1926, p. 4, fig. 2.

³ Doubts raised by Carpenter as to my measurement of the length of *A*, and of the position of the left end grille hole (*A.J.A.*, 1929, p. 483), obviously counteract each other and, as he admits, do not in the least affect the location of this slab.

trophies, on the same three slabs and also on IV. With II and IV both Persian trophies, and VII a hoplite trophy, we may surmise that all four trophies were of these two varieties, arranged in pairs (eliminating the naval fragment *Z**). The intervening slabs III and VIII must have been occupied by attendants, symmetrically distributed, the two on slab III facing left toward the trophy on II, those on VIII facing right toward IX. But the trophies on slabs IV and VII were served by only two Nikes each, symmetrical with respect to the trophy. Thus the two central slabs V and VI must have combined to form an axial scene, of which we possess only the bull and Nikes of *A*; Carpenter suggests that slab VI contained an altar, but now, after the elimination of *J* and *R*, and taking into consideration the total absence of any fragments showing altars from any side of the parapet, this restoration seems doubtful. I prefer to consider slab VI as wholly lost and its subject unknown. With this single exception, we can now restore the attitude of every figure on the north flank.

On the west front, with nine slabs (IX–XVII) and sixteen figures (19–34),¹ Carpenter leaves only the return of the angle slab *C* unquestioned; he suggests that *G+AA* might as well go in slab XII as in X (though eventually preferring the former as in my restoration), and transfers *DD* and *E* each one slab to the right of the positions which I had assigned. I believe, however, that the position of *G+AA* is definitely established by measurement.² As for the two pieces *DD* and *E*, it would seem that they should be returned to the slabs XII and XIII to which I had assigned them, with Athena seated at the exact centre of the parapet. For the wing fragments *HH* and *LL*, which had been united by Heberdey (though they do not actually join) because of similarity of style, attitude, and relationship to left joint,³ likewise both belong on the west front, *HH* because of the similarity in style to the west arm of *C*,⁴ and *LL* because it is cut at the back to fit the temple steps.⁵ Taking into consideration this independent evidence that both fragments belong

¹ Heberdey had assumed seventeen figures here, two being on the southwest corner slab, an error due to the placing of *B* in this position.

² *A.J.A.*, 1926, p. 18, n. 1. Carpenter notes (*A.J.A.*, 1929, p. 483) that his measurement from the northwest corner to the first dowel hole is greater than mine; I suggest that this may be due to a wide crack in the temple step now filled with cement for which I had allowed when publishing my preliminary article; hence I doubt the shifting of the grille hole toward the north in such a way that *G+AA* might be assigned to slab XII as well as to X. And if we analyze the layout of the stone joints (see p. 288), it becomes evident that any further southward shift of the parapet joints is impossible. An attribution of *G+AA* to slab XII, furthermore, is rendered impossible by the necessity of reserving that position for *DD* with which, as Carpenter notes, *G+AA* could not be harmoniously combined.

³ *Jh. Oestl. Arch. I.*, 1922/4, pp. 44, 76; cf. *A.J.A.*, 1926, p. 26.

⁴ *A.J.A.*, 1929, p. 475.

⁵ *Ibid.*, 1926, pp. 9, n. 1, 26.

on the west front, Heberdey's combination is hardly to be doubted; and is in fact so represented by Carpenter, but in slab XVI, off the temple steps!¹ On the basis of construction (fitting the temple steps) and style (attribution to Master "D") the only available positions would be slabs XIV or XIII, displacing either the seated Athena (*E*) or the sacrificing Nike (*DD*) or both. Since the stylistic differences between *DD* and *E* confirm my supposition that *DD* was to the left of *E*, thus supplying the motive for the turning of Athena's head,² it seems obvious that the standing Nike *HH+LL* cannot be interposed between *DD* and *E*, thus separating Athena from the scene of sacrifice by a complete slab or more. Hence we must return *E* to slab XIII and *DD* to slab XII, in agreement with my previous restoration. So placed, the seated Athena (*E*) on the rock carries up the line of the pier between the niches exactly as do the rock-enthroned divinities above the antae in the contemporary east frieze of the Theseum.

As for the composition on the west front, we must now admit, on the analogy of the north flank, that more exact symmetry prevailed than I had at first believed possible, and that there were probably four trophies rather than three. Thus, as Carpenter points out, the length of the corner slabs could best be filled by assuming that a trophy stood next to the joint. It is toward the left end trophy that the Nike *G+AA* was rapidly striding; she is in position and in pose an accessory figure, and the shield which she carries betrays the fact that the left end trophy was of the hoplite variety. And the right end trophy was undoubtedly a naval trophy; for, with a trophy near the left joint of the west arm of *C*, it is here that we may locate the missing fragment *Z** which seemed less appropriate for the right end trophy on the north flank. Since these two trophies are so far apart that others must have intervened, we must restore a third on slab XI, the only possibility between fragments *G* and *DD*; and this would have been balanced by a fourth on slab XV. On the analogy of the north flank, we may assume that these would have formed pairs, those on slabs IX and XI being both hoplite trophies, those on XV and XVII naval trophies, at the southwest corner toward the sea. The wing *X*, seemingly in rapid movement toward the right, and in the style of Master "D", would balance *G+AA* in slab XVI (32); I see no reason for Heberdey's assumption, followed by Carpenter, that it must belong to a Nike immediately beside a trophy. The only other piece in the style of Master "D" (elim-

¹ [I note that Carpenter now (*Parapet*, p. 55) states that *LL* "is not part of the same wing" as *HH* and eliminates it from the folding plate, doubtless because of this difficulty.]

² *A.J.A.*, 1926, p. 22.

nating *Q* which differs in style) is the quietly standing Nike *N*, who does not seem to be engaged with a trophy; nor could we place her to the left of Athena, in the scene of sacrifice, without limiting Master "C" to six figures (19-24) as contrasted with ten (25-34) for Master "D"; and such limitation of Master "C" is contradicted by the great number of preserved fragments of his work. Therefore the only suitable place for *N* is in slab XIII together with Athena (a possibility already suggested by Carpenter) or possibly in slab XIV of which the subject is unknown. By Master "C" are two Nikes facing right, *D* and *I**, which can only be placed to the left of the two hoplite trophies; the more fragmentary *I** seems preferable for 19 on the corner slab, leaving *D* for 22. The fragments *MM* and *RR* moving toward the right, in Master "C's" style, and with windswept draperies, were perhaps parts of the Nike (25) at the head of the sacrificial bull. Of Nikes facing left, *W* would harmonize well as 20, in the same slab with *G+AA*. The small fragments *FF*, *JJ* and *QQ* must remain unplaced.

On the south flank Carpenter proposes a drastic revision of my scheme, or rather a return to Heberdey's scheme with only eight slabs (XVII-XXIV) instead of sixteen (XVII-XXXII). The number of human figures, which Heberdey had assumed to be fifteen, Carpenter enlarges to sixteen by increasing the length of the southwest corner slab, while I had as many as thirty-one. Carpenter was induced to return to this old theory that the parapet terminated opposite the southeast corner of the temple, rather than against the south extension of the Propylaea, because of a very questionable restoration of the southwest corner slab. For he assumes that I arbitrarily chose one of two possible lengths for this slab (0.925 m. instead of 1.23 m.), and that, if we select the alternative length, it would be possible so to combine *C+M* (exactly as they now stand in the Acropolis Museum)¹ as to give, according to the spacing of the grille holes, the supposedly satisfactory length of 1.209 m. Thereby the only other piece from this flank exhibiting grille holes, *O*, was found to fit in the third slab on this flank rather than in the eighth as I had imagined. By thus contracting the interval between *C* and *O*, all the other pieces assignable to the south flank could be distributed within eight slabs; and having "no more available masters and no more unassigned pieces of sculpture, it would be a gratuitous creation of difficulties to destroy the symmetrical response of south flank to north by assuming that the sculpture of the Parapet continued."²

But this restoration of the southwest angle slab with a length of

¹ See *A.J.A.*, 1926, p. 7, fig. 3.

² *A.J.A.*, 1929, p. 481.

1.209 m. seems impossible on internal grounds alone. For it does not actually give room for the combination of the two pieces *C* + *M*. Though Carpenter notes that "we put these two fragments together, so that the Nike in *M* touches the vertical prolongation of the trophy stump in *C* in the same way that the Nike touches the trophy on *S*," yet a glance at his restoration will show that the tree-trunk is of necessity made not vertical but oblique.¹ And the same observation results from the measurements: I had noted that the trophy on *C* is centred about 0.75 from the corner of the parapet;² allowing 0.03 m. for the minimum radius of the tree-trunk near the top (as on *H*), and 0.46 m. as the width of *M* on the actually preserved background, to the Nike's elbow, we obtain a *minimum* length of 1.24 m. for the slab as thus constituted, and thus 0.03 m. too great for the very accurate calculation by means of the grille holes. The discrepancy is even greater than this, however; for Nike was not merely passing her arm behind the tree-trunk, as on *S*, but extended the forearm upward diagonally toward the top of the trophy, as can be discerned from her attitude. This makes it necessary to interpolate at least 0.10 m. additional;³ and with the slab thus lengthened, it would be necessary to increase it beyond Carpenter's estimate by one grille hole, giving 1.355 m., an unprecedented length for a corner slab.

A vital objection to the assumed corner slab of 1.209 m., valid also against the amended length of 1.355 m., involves a lengthy discussion of stereotomy (Fig. 1). My preference for the shorter length of about 0.925 m. had not been purely arbitrary, but was based on the difference between the front and flank systems of joint spacing, whereas the length of about 1.23 m. appears only in the exceptional corner slab beside the little stairway. If we examine the blocks of the bastion walls, it is apparent that the ordinary blocks everywhere average 0.6145 m. (headers) or 1.229 m. (stretchers) in length, thus corresponding exactly to the normal parapet slab lengths, and that the joints in the second, fourth, sixth, etc., courses below the cornice align with the parapet joints, both on the north and on the west.⁴ Such, too, must have been the case on the south flank. The corner blocks of the bastion, furthermore, have average lengths of 1.764 m. in the top course on the west, of $1\frac{1}{2}$ x 0.6145 m. less or 0.842 m. in the second below the cornice. The corner slabs of the

¹ A.J.A., 1929, p. 479, with fig. 11.

² Ibid., 1926, p. 22.

³ As a matter of fact, the trophy on *M* was undoubtedly centred 0.615 m. from the right joint, at the centre of a normal slab.

⁴ See A.J.A., 1926, pl. I. The slight eastward shifting of the north parapet joints, and southward shifting of the west parapet joints, as perceptible in this drawing, actually occurred and are explained below.

parapet on the west are equivalent to these corner blocks of the second course, increased by the projection of the parapet from the bastion ($0.185 + 0.072 = 0.257$ m.), thus giving the length of 1.099 m. which corresponds with the dimension 1.095 m. obtained from measurement of the dowel holes on the temple steps. The awkward northwest corner slab was laid first,¹ without allowance for the reduc-

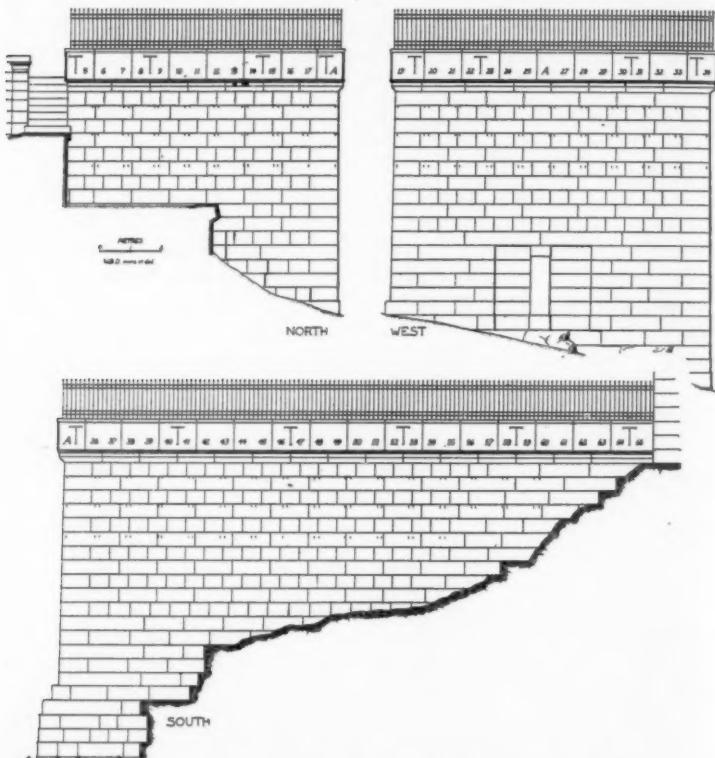


FIGURE 1. RESTORED ELEVATIONS OF THE NIKE BASTION

tion of 0.070 m. caused by the obtuse angle, whereby all the parapet joints were shifted slightly south of the wall joints with which they were intended to correspond. So also on the north flank, the length of the west corner block is 0.902 m. in the first and other odd courses counting downward from the cornice (gradually increasing by the amount of the batter), and the same amount increased by $1\frac{1}{2} \times$

¹ *A.J.A.*, 1926, p. 11, fig. 6.

0.6145 m., giving 1.824 m., in the second and other even courses. This length in the second course, increased by the projection of the parapet beyond the bastion (0.257 m.), gives 2.081 m., which should have corresponded to the combined length of the two westernmost parapet slabs. If the second parapet slab had been of the normal length 1.229 m., the corner slab would have measured only 0.852 m.; to avoid congestion the corner slab was increased to the length of the corner blocks of the bastion wall, 0.902 m., whereby the second slab would have been reduced to 1.179 m. Again, with the northwest parapet slab laid without allowance for the reduction of 0.070 m. caused by the obtuse angle, it was necessary to divide this reduction between two other slabs, the second from the west (1.150 m. instead of 1.179 m.) and the east corner slab (0.945 m. instead of 0.986 m. as demanded by the joints below). Hence all the north parapet joints are shifted slightly east of the wall joints with which they were supposed to correspond. But on the south face of the bastion, lacking the difficulty of the obtuse angle, we may assume that the theoretical slab lengths of 0.902 m.,¹ 1.179 m. and 1.229 m. which would have fitted the stereotomy below were actually applied, apart from accidental irregularities of workmanship.

On the other hand, if we consider the problem which faced the architect who was commissioned to encircle the bastion with a protecting parapet and grille, it is obvious that it hardly admitted of any other solution than that which I have indicated (Fig. 2).² The Nike bastion extended on the south flank as far as the Propylaea with its characteristic masonry, and even the pairs of anchor slots for fastening decoration immediately below the cornice.³ Likewise the marble pavement of the bastion extended to the line of the Propylaea. The implication is that the marble cornice (now missing) also extended "together with the pavement of which it formed the edge and the bastion decoration of which it formed the crown, . . . eastward as far as the Propylaea, the first obstacle against which it could logically have terminated." For the Acropolis wall proper, and hence its poros parapet, did not extend westward of the line of the Propylaea; west of this line what survives of the lower masonry is all later than the Acropolis wall, and belongs rather to the Pyrgos. And with the marble cornice carried to the junction with the Acropolis wall in the line of the Propylaea, the architect who subsequently added the sculptured parapet must needs have followed the same example. Otherwise he would have defeated his own ends. By

¹ For the probable increase in the length of the corner slab from 0.902 m. to 0.917 m., see below.

² [This may now be compared with Carpenter's plan (*Parapet*, p. 7, fig. 1).]

³ A.J.A., 1926, p. 3.

terminating the parapet opposite the southeast corner of the temple, and leaving the rest unprotected, he would have created a standing invitation to all who wished to emulate the exploit of Aegeus.¹

I must, therefore, adhere to my original conclusion that the south flank of the parapet was more nearly 20 than 10 metres in length. As for the exact dimension, I have been obliged by more detailed investigation to increase my earlier calculation of 19.30 m.² For

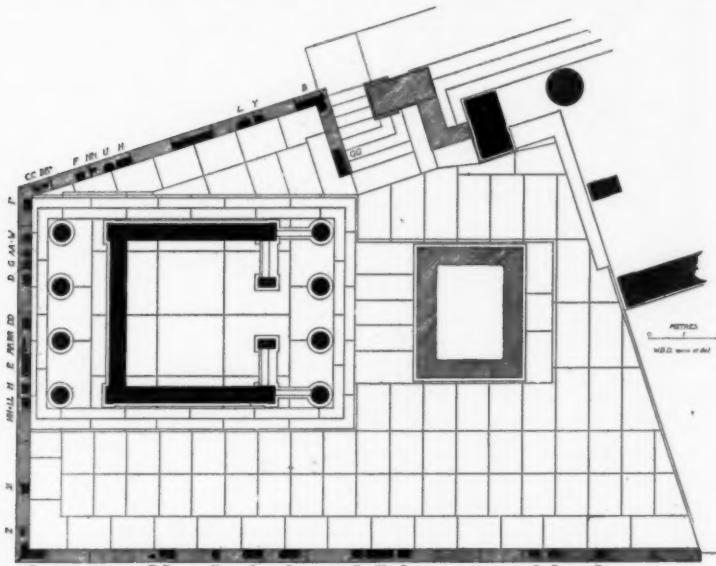


FIGURE 2. PLAN OF BASTION, RESTORED WITH LOCATIONS OF PARAPET FRAGMENTS

the northwest angle of the bastion really formed an angle of $107^{\circ} 57'$ rather than $107^{\circ} 17'$; ³ the necessary recalculations, and more accurate measurement of the location of the south extension of the Propylaea, increase the length of the south parapet by about 0.14 m. Thus, with fifteen slabs occupying a length of about $0.902 + 1.179 +$

¹ While the restoration of the parapet as terminating opposite the southeast corner of the temple now seems illogical, it must be remembered that in 1880, when Bohn and Kekulé originated this theory, there was an excuse for it in that conditions were obscured by the yet undemolished Turkish parapet wall which ran westward from the Propylaea to this very point, where it was broken away.

² *i.e.*, 19.23 m. on the cornice fascia (*A.J.A.*, 1926, p. 5), and 0.072 m. more for the projection of the parapet.

³ The correction is due to errors in the original construction of the temple of Athena Nike, which formerly induced me to think that it was slightly trapezoidal in plan; see, for the explanation, *Bull. A.J.A.*, XVII, 1926, p. 51.

$(13 \times 1.229) = 18.058$ m., the endmost slab would probably have had a length of 1.38 m., slightly longer than the end slab beside the stairway (1.31 m.) as seems proper in view of the heavier frame which would be desirable at the point of abutment against the Propylaea extension and the south wall of the Acropolis.

It might thus seem, at first glance, that we are faced by a hopeless dilemma. We discard the long corner slab, and hence the possibility of a compact arrangement of Master "E's" pieces *C*, *M*, and *O* as regulated by the grille holes, and return to the restoration of a long south parapet; but are we thereby obliged to return to my original arrangement with *O* and *M* respectively in the eighth and thirteenth slabs counting from the corner slab *C*, thus giving Master "E" a proportionately enormous area to cover? I believe that another solution is to be found as the result of my revised length for the second slab.¹ Let us again test the relation of grille holes to slab joints in the south flank of the parapet, with due allowance for the shortened second slab; the corner slab is assumed to be 0.902 m., the second 1.179 m., the others 1.229 m. The center of the first grille hole remains 0.182 m. from the end of the parapet, the second 0.302 m., and thereafter the spacing is uniformly 0.1455 m. Hence in the sixteen slabs of the south flank the grille hole immediately west of each joint should theoretically be centred at distances of 0.018 m. (XVII), 0.033 m. (XVIII), 0.098 m. (XIX), 0.017 m. (XX), 0.083 m. (XXI), 0.002 m. (XXII), 0.067 m. (XXIII), 0.132 m. (XXIV), etc., to the left of the joint. Farther east it seems unnecessary to seek the work of Master "E", since Carpenter has shown that on the other sides of the parapet no sculptor executed more than ten figures. Now the end grille holes are centred 0.035 m. and 0.015 m. west of the joints on *M* and *O* respectively. If we confined ourselves strictly to the limitation of a maximum of ten figures per sculptor, we should have to place *M* in slab XVIII and *O* in slab XX, the grille hole discrepancies being only 0.002 m., which would be very satisfactory. But this would be impossible from the viewpoint of composition, since the trophy which must have stood immediately in front of *M* would then be too close to that on *C*. On the other hand, a fairly close correspondence of measurements could be obtained by assigning *M* to slab XX and *O* to slab XXII, with discrepancies of 0.013–0.018 m. And these in turn would be eliminated if we increased the length of the corner slab to about 0.917 m., retaining the second slab as 1.179 m., the discrepancies then being only 0.002 m. in both cases. Thus we are

¹ In 1926, not having fully studied as yet the stone jointing on the south face of the bastion, I had assumed that the second slab was of normal length.

forced to assign at least eleven human figures to Master "E", which would not be out of keeping with this greater length of the south parapet in which we restore thirty-one figures in all. In fact, we could most plausibly assume that with thirty-one figures the work was divided between three masters, one ("E") perhaps doing eleven figures, the two others ("F" and a hitherto unsuspected "G") ten each.

In the south flank we have now located one trophy on the angle slab XVII (*C*), and another on XX (*M*); and we may, as formerly, conclude that there was one on the end slab XXXII. Because of the interval between XVII and XX it is obvious that the spacing of the trophies on the south, as I had formerly surmised, was greater than on the north. But, just as Carpenter's attribution of *L* to Master "A" forces us to adopt a symmetrical composition with four trophies rather than three on the north flank, so it would now seem that a symmetrical composition is preferable also on the south, the six trophies which I formerly suggested being now uniformly spaced on slabs XVII, XX, XXIII, XXVI, XXIX, and XXXII, with two intervening slabs between trophy slabs. Thus the Sandalbinder *O* in slab XXII would be the fifth figure from the trophy which she faced. Carpenter assumes that, for the sake of balance in his short south parapet, the Sandalbinder must have been a protagonist in a trophy scene: "this last assumption might seem far-fetched and unlikely, had not good fortune happened to preserve the Munich relief upon which a wingless replica of the Sandalbinder actually confronts a maiden swathing a herm."¹ But the evidence from the Munich relief is inconclusive; the Neo-Attic copyist was undoubtedly eclectic rather than accurate, and may have drawn motives from quite different portions of the parapet. In any case, the structural evidence, as well as Nike's attitude, are incompatible with the position beside a trophy.

To Master "F", Carpenter attributes four figures, two (*P* and *S*) belonging to trophies and two (*K* + *KK*), combined by Heberdey and Carpenter, depicting the scene with the bull.² All must go to the east of the six slabs executed by Master "E". If the total length of the south parapet included only eight slabs, we should have but two for Master "F", and the composition would be extremely unsymmetrical with the bull at the east end rather than at the centre as on the north flank. It is, furthermore, impossible

¹ *A.J.A.*, 1929, p. 480.

² I take this opportunity of apologizing for an error in *A.J.A.*, 1926, plate I, wherein a hasty departure for Greece, a misbound volume of the *Jah. Oest. Arch.* I., and the completion of plate I by a willing but unfamiliar friend, resulted in the delineation of *KK* in the guise of *H+U*.

to squeeze these four fragments into two slabs, in the manner suggested by Carpenter. For of the trophy pieces *P* and *S*, the former shows a Nike with a shield and so belonged with a hoplite trophy, the latter a Nike actually adorning a Persian trophy; Carpenter combined these two pieces in a single slab, making no allusion to the different sorts of trophies. It is obvious therefore that Master "F" was concerned with two trophy scenes, or with parts thereof. Consequently Master "F" was responsible for at least three slabs, thereby exceeding the total number of eight slabs in the Heberdey-Carpenter form of the south parapet. But with sixteen slabs on the south we may follow the analogy of the north and west in locating the scenes of sacrifice at the centre of the parapet in slabs XXIV-XXV; *K+KK* would occupy slab XXV, leaving XXIV (like VI on the north) for a companion scene as yet unidentified. We have seen that the appropriate slabs for trophies on the south flank would have included XXIII and XXVI, both falling within the domain of Master "F". Hence one of these two slabs had a hoplite trophy, the other a Persian trophy. In either case *P* must have been the figure immediately to the left of the trophy itself, rather than an accessory figure; for the latter possibility is eliminated by the position of *O* on slab XXII, and by that of *KK* in slab XXV. But before coming to a final decision we must consider the remainder of the parapet.

One of Carpenter's reasons for curtailing the length of the south parapet was, as we noted, that we have "no more available masters and no more unassigned pieces of sculpture." But he himself seems to betray doubt that all the work assigned to Master "D" is by the same hand. Certainly it is dissimilarity, rather than similarity, that one sees between *Q*, for instance, and such of Master "D's" work as *E* and *N*.¹ Consequently we must regard *Q* as the work of Master "pseudo-D". And the analogies between Masters "D" and "B", to which Carpenter alludes, seem to be chiefly between this fragment *Q* and two pieces (*J* and *R*) which, though attributed to Master "B", show nothing of the "brilliant calligraphic swing" which characterizes *A* (right half) and *H+U+NN*. We may more justifiably assign *J* and *R* to Master "pseudo-B". We may even, I believe, go farther and state that "pseudo-B" + "pseudo-D" = "G", a hitherto unsuspected master whose hand is evident in *J*, *Q*, and *R*.²

It is to Master "G" that we assign the easternmost third of the south parapet, approximately ten figures (56-65); and here belong

¹ [Contrast Carpenter, *Parapet*, pl. XX, 2 (*Q*) with pl. XIX (*E*) and XX, 1 (*N*).]

² [Compare Carpenter, *Parapet*, pl. XX, 2 (*Q*) with pl. VIII (*J*) and IX (*R*).]

the three fragments *J*, *Q*, and *R*. These are so deficient in constructive marks or other modes of identification that they can be placed only approximately. On *R*, however, appears a greave showing that the Nike stood at the right of a hoplite trophy, probably immediately adjoining. Two trophies, probably therefore both hoplite trophies, would fall within Master "G's" domain, on slabs XXIX and XXXII; in the latter case, *R* would be the endmost figure of the entire series (65). But two grille holes on the top of *R*, while unrelated to a joint, would better fit slab XXIX (coming about 0.757 m. and 0.903 m. from the left end of the slab); we may tentatively identify *R* as 59. Possibly *J* faced *R* on the same slab, as Carpenter suggests, thus being figure 58. As for *Q*, facing toward the front, and without attributes, we must regard her as an accessory figure, possibly as 61.

In any case, we have in *R* a hoplite trophy by Master "G"; hence it is probable that all three trophies at the right were of the hoplite variety, those at the left Persian. For, if we may judge from the north flank, the trophies probably did not vary in rotation; and the difference between the two central trophies (*P* and *S*) shows that on the south they did not vary in pairs; hence they seem to have formed two groups of three. This scheme has the advantage of bringing a different kind of a trophy before the seated Athena on each side of the parapet. Consequently, in the two pieces *S* and *P* by Master "F", we may place the former at the left as 47, the latter at the right as 52, these being the very positions to which I had originally assigned them. And the curious Persian trophy fragment *T**, which cannot be combined with *L* on the north flank, on account of the position of the arms,—nor assigned to the west flank, where there were no Persian trophies,—remains therefore as another candidate for the left half of the south flank. But here it cannot be combined with *S* by Master "F"; therefore we must attribute it to "E", the Master of the Sandalbinder. Lest this occasion surprise, it must be remarked that the apparent crudeness of this piece is due largely to weathering and to maltreatment when it served as a Turkish threshold. As for its place, since the presence of Nike's arm definitely excludes the trophy on the corner slab *C*, the only possibility is to insert it in slab XX together with *M*.

There remains one other piece of Master "E's" work, the fragment *V*, located in slab XVIII by Carpenter on the assumption that the drainage hole should be at the same distance from the southwest corner of the parapet as that (restored) on slab VIII would be from the northwest corner. But the non-existent hole on slab VIII is problematical; it might have been on slab VII, or perhaps

nearer the corner; and in any case the conditions were so different at south and north that exact reduplication of drainage systems is hardly to be expected. If there was a drainage hole near the joint XVII-XVIII, as seems necessary, and another under *KK* near the joint XXV-XXVI, as is now certain, then we may assume that there would have been one exactly midway between, near the joint XXI-XXII. That being the case, we now assign *V* to the right end of the slab XXI (43).

In order to exhibit the progress of the work, and to provide a basis for future study, the results of the four latest investigations may be tabulated as follows:

Fig. East	Heb.	Din.1	Car.	Din.2	Fig. South	Heb.	Din.1	Car.	Din.2
1	GG	GG	GG	GG	35	B	C	C	C
2	O				36	X	R	M	
3					37				
4	C	B	B	B	38	L		V	
5	C	B	B	B	39	S		O	T*
6					40	P			M
7		Y		Y	41	D			
8	K		L	L	42	F			
9	KK+Y				43	M	KK	K	V
10		A	A	A	44	A	KK	P	O
11		A	A	A	45	A		S	
12		J			46	J		S	
13	N	R			47	Q	S		
14	H	H	H	H	48	Z*+CC		T*	
15	U	U	U+Y+NN	U+NN	49	O			K
16	R			F?	50				KK
17			P		51		P		P
18	PP	Z*+BB*+CC	Z*+BB*+CC	BB*+CC	52				
West			MM	I*?	53				
19				W?	54				
20					55				
21	AA+G	AA+G	D	AA+G	56				
22	DD	W	W	D?	57				
23	I*				58				
24	E+BB*	DD		DD	59		M		J?
25	W		I*?	MM+RR?	60				R?
26	HH+LL	E	DD	E	61		V		
27	G	I*		N	62		X		Q?
28	MM+T*	T*	E	HH+LL	63				
29	V		N		64		L		
30			X		65				
31									
32			HH+LL	X					
33			Q						
34	B ^a	C	C	Z*+C					

As shown by this table, of the twenty-six pieces which I believed that I could locate in 1926, Carpenter retained eleven, altered fifteen, and added ten, a total of thirty-six pieces. In the present revision I retain fifteen of my former attributions, but, partly as the result of Carpenter's helpful and discriminating analysis of the stylistic evidence, partly because of necessary readjustments of the structural evidence, I accept three of his twenty-five new proposals, and make nineteen new identifications, placing thirty-seven pieces out of the total of forty-four.

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¹ With an extra figure at the southwest corner, Heberdey's 34 should really be divided into 34a and 34b, the latter being *B*; but to avoid confusion in the table this variation is disregarded.

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A BABYLONIAN CITY IN ARABIA

MIDWAY between Mecca and Damascus and a halfway point in the southern line of travel between Babylonia and Egypt flourished ancient *Tēmā* (Fig. 1), now known as Teima. Ptolemy in his map of Arabia Felix refers to the city as *θαίμα*.¹ The early prosperity and prestige of this location originated from an oasis of uncommon dependability. Routes for intertribal and international trade found it a convenient focus.² It served also as a rendezvous in strategic military operations.³ Muḳaddasi, the famous Arabian geographer of the tenth century A.D., describes Teima as a city of antiquity covering an extensive area copiously supplied with water and therefore noted for its palm trees which bore dates of excellent quality.⁴

It is probable that ancient non-fanatical *Tēmā* witnessed the coming and going of numerous alien sojourners, but few non-Moslems have been able to reach Mohammedanized Teima. The first European explorer to view its settled community and write of its favorable location was G. A. Wallin, a Swede, who remained a week at the oasis in April, 1848.⁵ Carlo Guarmani, an Italian, spent short periods at Teima in 1864.⁶ Thirteen years later the great English traveler Charles M. Doughty visited it twice in 1877, viz., February 27 to March 1st and September 2 to October 10.⁷ Doughty reported the existence of a stone at Teima bearing an unusual inscription.⁸ It was this which caused journeys thither by Charles Huber, a French Alsatian, and Julius Euting, a German Orientalist. Huber went to Teima for the first time in 1879, but was unable to decipher most of the writing on the stone.⁹ In 1883, accompanied by Euting,

¹ See Sprenger, *Die alte Geographie Arabiens*, p. 149. Upon "Ptolemaeus' Karte von Arabia Felix" which accompanies Sprenger's work the name appears as *Thaima*. The *θαίμα* of Ptolemy has also been regarded as denoting the same Arabian city. Cf. Carolus Müllerus, *Claudii Ptolemaei Geographia*, V, 18, p. 1015. For a different view see Musil, *Arabia Deserta*, "Oriental Explorations and Studies" of the American Geographical Society, No. 2, p. 506 f.

² A summary of the caravan routes through Teima is given in Jaussen and Savignac, *Mission Archéologique en Arabie*, II, p. 144, note 3. Cf. also Moritz, *Arabisch—Studien zur physikalischen und historischen Geographie des Landes*, p. 30 f., note 3; Hartmann, *Die arabische Frage in der islamische Orient*, II, p. 35 f.; Musil, *op. cit.*, No. 2, pp. 516 ff.

³ See Caussin de Perceval, *Essai sur l'Histoire des Arabes avant l'Islamisme*, etc., III, pp. 421 ff.

⁴ De Goeje, *Bibliotheca Geographorum Arabicorum*, III, p. 252 f. Bekri also refers to the fertility of Teima. See Wüstenfeld, *Das geographische Wörterbuch des Abu 'Obeid 'Abdallah ben 'Abd el-'Aziz el Bekri*, I, p. 209.

⁵ Hogarth, *The Penetration of Arabia*, p. 169. ⁶ Hogarth, *op. cit.*, pp. 266f.

⁷ Doughty, *Arabia Deserta*, I, pp. 284–300.

⁸ *Ibid.*, I, p. 532.

⁹ Hogarth, *op. cit.*, p. 281, note 1.

a second attempt was made.¹ The inscription was secured by copy and impression and the stone itself was purchased. This famous inscribed object is now in the Louvre. In the spring of 1909 a short stay at Teima was achieved by two French Dominicans from



FIGURE 1. MAP SHOWING LOCATION OF ANCIENT TêMA

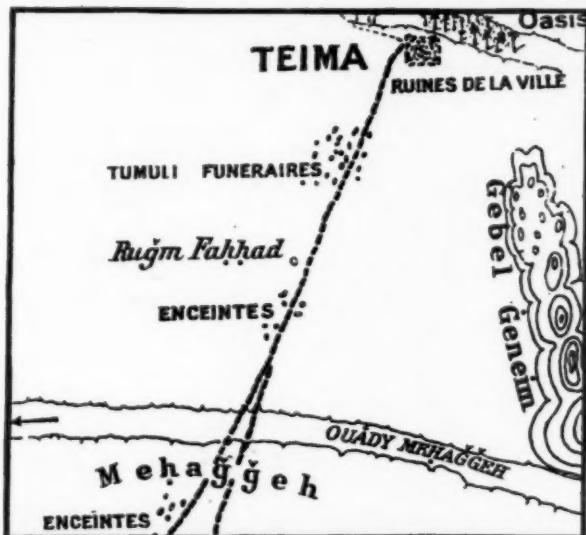
Jerusalem, Père A. J. Jaussen and Père R. Savignac.² The fact that only a few outsiders have been able to reach what must be regarded as one of the renowned sites in Arabia stresses the value of the information which has been recorded by them.³

¹ Huber, *Journal d'un Voyage en Arabie*, pp. 376-384.

² Jaussen and Savignac, *Mission Archéologique en Arabie*, II, pp. 109-165.

³ The writer's interest in Teima is very great and hence it is to be counted no little advantage to have had the privilege of coming into personal contact with

Meager accounts are at hand concerning the topography of the region in which Teima is located. The site stands 3400 feet¹ above sea level on a solid geological formation,² whose elevation above the surrounding desert is slight. The territory bordering on Teima is extremely arid, being unrelieved by "blade or bush."³ Deposits of excellent salt add to the fame of Teima throughout Arabia.⁴ Its climate is salubrious due to the absence of miasmatic conditions.⁵



(Jaussen and Savignac, *Mission Archéologique en Arabie*, Part II, Atlas, Plate LVII)

FIGURE 2. MAP SHOWING THE OASIS AND LOCATION OF ANCIENT RUINS AT TEIMA

The actual oasis of Teima⁶ is an elongated depression extending about three kilometers from northwest to southeast with a width of from four to five hundred meters (Fig. 2).⁷ Doughty expressed the

three of the seven explorers who have made Teima known to the modern world. In August, 1925, a few months before Doughty's death, there was opportunity to confer with him in his home, and later Jaussen and Savignac were met in Jerusalem.

¹ Doughty, *op. cit.*, p. 285.

² Wallin says, "Teima stands on a mass of crystalline limestone." See *Cyclopaedia of Biblical Literature*, X, p. 242. Doughty, *op. cit.*, I, p. 286, refers to sandstone as the general rock formation at Teima, and in the same work, I, p. 531, he emphasizes the scarcity of limestone in the vicinity of Teima. Moritz, *op. cit.*, p. 5, indicates that "Sandstein" rests upon "Urgestein" in the northwestern part of Arabia.

³ Doughty, *op. cit.*, I, p. 284. ⁴ *Ibid.*, p. 296. ⁵ *Ibid.*, p. 287. ⁶ According to Doughty, *op. cit.*, I, p. 533, Teima consists of three oases. Cf. *ibid.*, p. 287 for his drawing representing the three oases.

⁷ Jaussen and Savignac, *op. cit.*, II, p. 148.

view that the whole area of Teima was formerly submerged with sufficient water to form a lake.¹ It is not surprising, therefore, that sediment thus precipitated produced extremely fertile soil. In addition, an enormous well springing from an inexhaustible source bestows abundant water upon the gardens and groves of the community.² There is continuous lifting of water from this well day and night.

Supplied with an excess of irrigation, Teima is "an island of palms," producing many kinds of admirable dates.³ Other fruits are grown and there is tillage of the land for various kinds of cereals.⁴ However, dates constitute the main article of diet; bread seems to be eaten rarely.⁵ It is probable that this is due in large measure to the extreme scarcity of fuel. The palm groves and gardens at Teima are protected with walls, and most of the houses are within these enclosures.⁶ Watch-towers exist for the purpose of guarding against imminent danger.⁷ Very narrow streets run between the walled sections of the oasis.⁸ Doughty estimated that there were 200 houses in Teima,⁹ but Huber put the number at 300.¹⁰ A view of a section of Teima (Fig. 3) presents an alluring appearance.

¹ Doughty, *op. cit.*, I, p. 296. Moritz, *op. cit.*, p. 25, quotes Bekri (158) thus: "Tēmā liege am Ufer eines Sees von einem Farsach Länge." Arabs assert that Teima has been repeatedly devastated by floods. Huber's testimony is that he was informed that Teima was submerged by destructive inundations at three different times. See Huber, *op. cit.*, p. 378. Doughty, *op. cit.*, I, p. 287, gained the impression that Teima was flooded twice. After each catastrophe the inhabitants rebuilt the city on top of the old structural remains. It is natural to assume that these floods occurred in the depression of the oasis and not on the higher ground where the oldest ruins are found. If an inland lake of considerable extent existed at one time where modern Teima is located, the prosperity of ancient Tēmā, situated on the border of this body of water, becomes much more intelligible. Furthermore, that the site must have been exceedingly attractive will be recognized by all. There is additional reason, therefore, for Nabonidus' long stay at Tēmā. See the discussion of "Climatic Changes in the Nearer East" by Olmstead and Huntington in *Bulletin of the American Geographical Society*, XLIV, pp. 432-447. The opinions of Huntington are favored by what is now known concerning ancient Tēmā. Cf. *Journal of the American Oriental Society*, L, pp. 1-25 for the writer's view concerning "The Sealand of Arabia."

² Doughty, *op. cit.*, I, p. 292; Jaussen and Savignac, *op. cit.*, II, p. 150.

³ Doughty, *op. cit.*, I, p. 285.

⁴ *Ibid.*, p. 294; Jaussen and Savignac, *op. cit.*, II, p. 149 f.

⁵ Huber, *op. cit.*, p. 380; Jaussen and Savignac, *op. cit.*, II, p. 149.

⁶ Huber, *op. cit.*, p. 377.

⁷ Doughty, *op. cit.*, I, p. 285, states, "Every well-faring person, when he had fortified his palms with a high clay-brick wall, built his tower upon it; also in every sūl of the town was a clay turret of defence and refuge for the people of that street. In a private danger one withdrew with his family to their walled plantation: in that enclosure they might labour and eat the fruits, although his old foes held him beleaguered for a year or two. Any enemy approaching by daylight was seen from the watchtower."¹¹ Huber, *op. cit.*, p. 377.

⁸ Doughty, *op. cit.*, I, p. 288.

¹⁰ Jaussen and Savignac, *op. cit.*, II, p. 149. See Sprenger, *Die alte Geographie Arabiens*, p. 149, for the following statement: "Taymā hat jetzt 1,000 Einwohner; die zweistöckigen, aus Luftziegeln und Pisé aufgeführten Häuser sind in Palmenpflanzungen und Gärten versteckt." This estimate of the inhabitants of Teima

Teima has maintained definite relations with the outside world. It has not been an isolated spot in the midst of the desert. In Doughty's time there was an Egyptian sojourning at Teima,¹ but the main affinities have been with the east,² due to the importation of various Mesopotamian products.³ These evidences of Teima's modern contact with the Nile valley and the Tigris-Euphrates region are interesting because the Teima Stone reveals a similar situation in ancient times.⁴

There has been no exhaustive investigation of the ruins of Teima, for those who have visited its area could indulge in only cursory



(Jaussen and Savignac, *Mission Archéologique en Arabie*, Part II, Atlas, Plate LXIII, No. 1)

FIGURE 3. A TYPICAL SCENE AT TEIMA IN ARABIA

examination of archaeological remains exposed to view. Real excavation, although presenting tempting prospects, was impossible. It is remarkable, therefore, that the following significant survivals of former occupation, worthy of careful study and interpretative attention, have been found at Teima.

Ancient Flints and Sherds. Chips of worked stone and fragments of pottery are regarded as valuable archaeological criteria. Such remains have been found at Teima. Doughty writes, "Little red

was made in the year 1875. Probably it was based upon that made by Guarmani in 1864. See Zehme, *Arabien und die Araber seit hundert Jahren*, p. 301.

¹ Doughty, *op. cit.*, I, p. 541.

² *Ibid.*, II, p. 312. Doughty's words are, "All Nejd Arabia east of Teyma appertains to the Persian Gulf traffic, and not to Syria."

³ For indications of Teima's commercial contact with the Tigris-Euphrates valley see Doughty, *op. cit.*, I, 286, 295, 334; II, 6, 9, 295, 319.

⁴ See p. 306.

shivers of silex or cornelian lie strewed upon the old town-site; which are foreign to this country."¹ Farther on he reports finding "strewed potsherds of the ancients, and broken glass" on the ground between the walls of the oasis and the salt deposits.² It would be most interesting if the ceramics of ancient Teima could be studied more intensively.

Ancient Wells. A sign of the energy and ingenuity of the early inhabitants of Teima may be found in wells which were dug in the distant past. Doughty says of those who dwelt in Teima in his time, "Their wells are only the wells of the ancients, which finding again, they have digged them out for themselves: barren of all invention they sink none, and think themselves unable to bore a last fathom in the soft sand-rock which lies at the bottom of the seven-fathom wells."³ The virility and industry of those who made up the old community at Teima, as illustrated by the wells which they dug, suggest corresponding ability along other lines.

Ancient Tombs. In a southerly direction from the oasis of Teima is situated what Huber calls "un champ de petites collines." He further describes them as "l'ancienne cité des morts de Teimâ."⁴ No extensive examination of this cemetery was made by Huber. Jausseen and Savignac, although their stay at Teima was very short, noted the elevations when arriving and departing.⁵ They refer to them as "tumuli funéraires" (Fig. 2) and "tertres funéraires dans le désert au sud-sud-ouest de l'oasis."⁶ These tumuli, constructed of earth and stone as shown in Figure 4, range from 8 to 12 meters in diameter and average from 2 to 3 meters in height.⁷ They are scattered irregularly over the plain to a distance of several kilometers. It is surmised that these burial structures are as old as the ruins whose description follows.

Ancient City Ruins. South of the oasis a large extent of ground surface, quadrilateral in shape, contains a collection of formless ruins.⁸ In Figure 2 this area is indicated clearly with the designation "ruines da la ville." Accumulated sand and the hand of man have contributed to the obliteration of many vestiges of antiquity. Arabs, in their attempts at masonry, have ever been ready to employ the materials of ancient buildings.⁹ Despite its desolate and

¹ Doughty, *op. cit.*, I, p. 550.

² *Ibid.*, p. 551. See also *ibid.*, II, pp. 393 and 419.

³ *Ibid.*, I, p. 286. Cf. *ibid.*, p. 552.

⁴ Huber, *op. cit.*, p. 386.

⁵ Jausseen and Savignac, *op. cit.*, II, pp. 133 and 153.

⁶ *Ibid.*, II, Atlas, pl. LXIV, 3.

⁷ *Ibid.*, II, p. 155.

⁸ *Ibid.*, II, p. 151 f.

⁹ *Ibid.*, II, p. 148, describes "les maisons des riches propriétaires" in Teima as follows: "Les murs, relativement épais, sont en briques crues entremêlées parfois avec des pierres arrachées dans les ruines de l'ancienne ville." Cf. Caussin de Perceval, *Essai sur l'Histoire des Arabes avant l'Islamisme*, etc., II, p. 332, for the

chaotic character, there can be no doubt that this tract represents the "emplacement" of the ancient city. Approximately in the center of the expanse of ruins is a knoll surmounted by a *rujm*, or heap of stones.¹ That some important structure existed formerly at this spot is evident. Its architectural features and the purpose for which it was used are not revealed. Surrounding the area of archaeological remains are the clearly-marked ridges of the ancient enclosing wall. Doughty surmised that the extent of the wall around the city was almost three miles;² Jaussen and Savignac gained the impression that its perimeter did not exceed three kilometers.³ These estimates provide a basis for the conclusion that



(Jaussen and Savignac, *Mission Archéologique en Arabie*, Part II, Texte, p. 151)

FIGURE 4. PLAN OF AN ANCIENT TUMULUS AT TEIMA

Teima of old was no mean city. According to Doughty there are indications that the wall was 6 feet thick and 18 feet high.⁴ He says, "The masonry of the great *sûr* (wall) is of rudely-wrought sandstone blocks laid to a face, in earthy clay for mortar: the midst between the stone faces is filled in with the same, which not crumbling under this climate, becomes yet harder with time."⁵ That this

following translation from Imrou'l-Qays: "A Taymâ, la tempête n'a laissé debout ni un palmier, ni une maison; les citadelles construites d'énormes blocs de pierre ont seules résisté à ses efforts." In all probability the enormous blocks of stone came from the ruins of the ancient city.

¹ Jaussen and Savignac, *op. cit.*, II, p. 152.

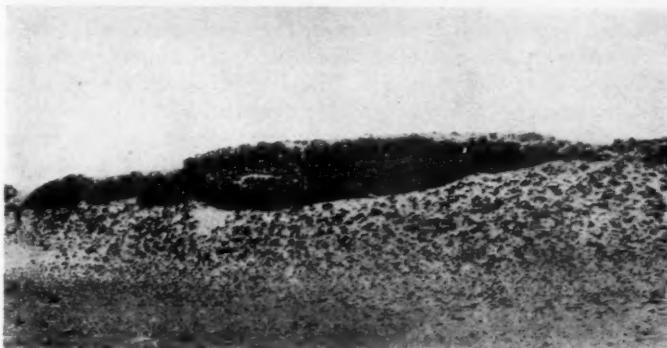
² Doughty, *op. cit.*, I, p. 287. Doughty states that the wall "lies somewhat above the oasis."

³ Jaussen and Savignac, *op. cit.*, II, p. 151. Their comment is as follows: "Néanmoins une ville de sept à huit cents mètres de côté était, surtout dans l'antiquité, une ville assez considérable et rien que cette enceinte suffit à nous montrer l'importance de l'ancienne Teima."

⁴ Doughty, *op. cit.*, I, p. 550.

⁵ See reference in note 46. Doughty adds, "Thus the old work is as a clay wall faced with masonry." A more detailed account of the structure of the wall as reported by Jaussen and Savignac, *op. cit.*, II, p. 151, is as follows: "Le rempart en question est bâti tout entier en pierres, avec ces pierres de grès, plates et noirâtres, d'un noir tendant sur le rouge foncé, qui se détachent facilement de la surface du sol un peu partout dans la plaine environnante. Les assises sont formées de petits blocs, hauts en général de 0^m, 15, atteignant quelquefois 0^m, 20, et égalisés entre eux par de plus petites pierres. Le revêtement extérieur paraît être fait sans mortier; l'intérieur du mur est en blocage avec de la terre."

wall together with the buried antiquities enclosed by it belongs to an early period of the city's history is clear. Figures 5 and 6 present



(Jaussen and Savignac, *Mission Archéologique en Arabie*, Part II, Atlas, Plate LXIV, No. 1)

FIGURE 5. SOUTHEAST CORNER OF THE ANCIENT WALL AT TEIMA

views of the wall and the ruins of a house or tower adjoining it. The nature of the débris in the vicinity of the wall is also indicated.

Ancient Columns. Both Doughty and Huber examined what the former describes as "antique pillars" lying a short distance "out of



(Jaussen and Savignac, *Mission Archéologique en Arabie*, Part II, Atlas, Plate LXIII, No. 3)

FIGURE 6. ARCHITECTURAL RUINS ADJOINING THE ANCIENT WALL AT TEIMA

the town (yet within the walls) eastward" in the vicinity of "the great mosque,"¹ and the latter designates "tronçons de colonne" in

¹ Doughty, *op. cit.*, I, p. 531 f. See *ibid.*, p. 288.

the cemetery "qui se trouve à 100 mètres au Sud de la grand mosquée."¹ Doughty writes, "I saw certain huge chapters lying there, and drums of smooth columns, their thickness might be twenty-seven inches, of some bluish limestone, and such as there is none (I believe) in a great circuit about. The sculpture is next to naught; we found not any inscription."² The English explorer came to the conclusion that he had discovered the site of ancient Teima's temple and remarked upon the rarity of "such great monuments" in Arabia. Huber was equally impressed with the importance of these architectural remains. He chanced upon a pedestal, with sides orien-



(*Corpus Inscriptionum Semiticarum, Pars II, Tomus I, Tabulae, Tab. X, No. 114*)

FIGURE 7. AN ARAMAIC INSCRIPTION FOUND AT TEIMA

tated to the cardinal points, composed of four carved stones badly joined together.³ Too much significance cannot be attached to the existence of archaeological material of this character at Teima.⁴

Ancient Inscriptions. It is probable that many stones bearing inscriptions have been entirely defaced with the passage of time at Teima. A few such objects are known to have survived the force of natural disintegration and the strain of rough usage. Doughty mentions two inscribed stones of secondary importance, one (of limestone) fixed in the jamb of a doorway (Fig. 7),⁵ the other set in

¹ Huber, *op. cit.*, p. 383.

² Doughty, *op. cit.*, I, p. 531.

³ Huber, *op. cit.*, p. 383. Huber made a slight excavation and wished for the opportunity of carrying on extensive digging at the site.

⁴ Jaussen and Savignac, *op. cit.*, II, p. 151, state that they were unable to visit the ruins of these columns at Teima.

⁵ Doughty, *op. cit.*, I, p. 291. The stone is 0^m. 30 long. Cooke discusses this Aramaic text in *A Text-book of North-Semitic Inscriptions*, p. 199. His transla-

the midst of a castle wall.¹ Teima is more famed, however, because of another record (Fig. 8) which is one of the most important of discovered Semitic inscriptions. The spot where this monument stood originally is not known. When heard of by Doughty in 1877² it



(*Corpus Inscriptionum Semiticarum*, Pars II, Tomus I, Tabulae, Tab. IX, No. 113)

FIGURE 8. FACE AND LEFT EDGE OF THE FAMOUS TEIMA STONE

was lying as part of a fallen wall at Teima's largest well. Doughty's report concerning its existence induced others to secure it so that its real significance might become known.³ Fortunately no mishap

tion with restorations is as follows: "The seat which Ma'nan, son of 'Imran, offered to the god Salm for the life of his soul." For an excellent pictorial reproduction of the stone see *Corpus Inscriptionum Semiticarum*, Pars II, Tomus I, Tabulae Fasciculus I, Tab. X, No. 114. Nos. 115 and 116, *ibid.*, represent the other minor inscribed objects found at Teima.

¹ Doughty, *op. cit.*, I, p. 296.

² *Ibid.*, p. 532.

³ See references to the work of Huber and Euting on p. 296 of this JOURNAL.

overtook it after Doughty left Teima, and hence an ancient document of increasing literary and historical value has been recovered. The whole inscription is not intact, but much of it can be read.¹



FIGURE 9. THE DEITY AND THE SUN EMBLEM ON THE TEIMA STONE

It commemorates an act of piety on the part of a priest, Salm-shezeb by name, whose father was Pet-osiri. Salm-shezeb instituted the worship of a new deity in *Tēmā*, as the name of the city appears in Aramaic upon the stone, with the result that endowments were established for the new cult. A perpetuating priesthood was also initiated. The Egyptian character of the name Pet-osiri needs no demonstration and the close affinity of the name Salm-shezeb to similar ones of Babylonian and Assyrian origin is equally apparent. Images graven on the left edge of the stone portray the deity and his priest in a style which suggests Assyrian influence. The relative position of these two pictured beings upon the stone is shown in Figure 8. The form which is clearly defined is that of the deity; below it is the smaller one of the priest. An enlarged representation (Fig. 9) of the section where the ancient artist placed his conception of the deity reveals certain striking characteristics. In vestment and miter there is a semblance of Assyrian habiliments and the very posture suggests the art of Nineveh and Babylon. However, the most ex-

¹ For the discussion, bibliography, and translation of the text see *Corpus Inscriptionum Semiticarum*, Pars II, Tomus I, pp. 107-115; Cooke, *op. cit.*, p. 195-199. A large picture of the stone, the material of which is grayish sandstone, is shown in *Corpus Inscriptionum Semiticarum*, Pars II, Tomus I, Tabulae, Fasciculus I, Tab. IX. This picture depicts the face and left edge of the stone (see Fig. 8 of this article). The stone is 1^m, 10 high, 0^m, 43 wide, and 0^m, 12 thick. The language which appears upon it is Aramaic of the early part of the second period of that language. See Cooke, *op. cit.*, p. 196. Huber, *op. cit.*, p. 384, styles it "stèle phénicienne," but Jaussen and Savignac, *op. cit.*, II, p. 144, use the descriptive term "stèle araméenne." According to Arab authors Teima of the pre-Islamic era was populated by Jews. See Jaussen and Savignac, *ibid.*, p. 146 f.

traordinary evidence of the presence of Assyrian influence may be seen in the symbol depicted above the head of the deity. It is the winged disk emblematic of the sun god so often portrayed on Assyrian works of art.¹ In Fig. 10 the attitude of the priest, similarly attired but with head uncovered, is more clearly shown. He is standing before an altar with his right arm uplifted in typical Assyrian fashion. One may detect evidences of a bowl in the hand.



FIGURE 10. THE PRIEST BEFORE THE ALTAR ON THE TEIMA STONE

Held by the horns of the altar is the head of a bull, the symbol of the moon god in South Arabia.² Below the altar and the worshiper appear the words "Salm-shezeb, the priest." Whoever delineated the human figures upon the stone was swayed to a considerable extent by the art which had developed in the Tigris-Euphrates valley. Another indication of Mesopotamian influence is seen in certain words

¹ Ward, *The Seal Cylinders of Western Asia*, p. 396. See also *Babylonian Boundary Stones and Memorial Tablets in the British Museum*, Plate XCII.

² The head of a bull, on account of the horns, was regarded as typifying the new moon, and hence it became a symbol of the moon god. See Nielsen, *Die alt-arabischen Mondreligion*, p. 110 f., and Nielsen, *Handbuch der altarabischen Altertumskunde*, pp. 214 and 244. The horns of the altar should be compared with the sacral horns found at Knossos. See Evans, *The Palace of Minos*, II, Part I, p. 159.

in the inscription which were apparently borrowed from the Babylonians.¹ It is thought that the stele belongs to the fifth (or sixth) century B.C.² There can be no doubt that the stone proves that *Tēmā* enjoyed substantial advancement in culture³ at that time with its activities molded largely by contacts with Egypt, Assyria, and Babylonia.

The foregoing summary of archaeological finds at Teima, made at different times by different persons during very hurried examinations



FIGURE 11. OBVERSE OF THE NABONIDUS CHRONICLE
REFERRING TO NABONIDUS' STAY AT TĒMĀ

of its environs, is exceedingly impressive. Of particular interest are the wall-enclosed remains of the ancient city, the architectural remnants of an imposing building, and the decorated stele inscribed with an illuminating record. All these evidences of antiquity possess new meaning because of light which cuneiform inscriptions have recently thrown upon the extraordinary rôle which the city played in the fortunes of the last reign of the Neo-Babylonian em-

¹ See Cooke, *op. cit.*, p. 198; *Journal of the American Oriental Society*, XLII, p. 309; Sidney Smith, *Babylonian Historical Texts*, p. 79 f.

² Cooke, *op. cit.*, p. 195; Sidney Smith, *op. cit.*, p. 79. The following judgment concerning the date is submitted in *Corpus Inscriptionum Semiticarum*, Pars II, Tomus I, p. 115: "Stelam ergo sexto saeculo ante J. C. adscribendam putamus et priori potius quam posteriori hujus saeculi parti."

³ Jausset and Savignac, *op. cit.*, II, p. 144, make the following assertion: "La fameuse stèle araméenne de Teima qui date du VI^e ou V^e siècle avant notre ère témoigne d'une organisation civile et religieuse parfaitement constituée."

pire.¹ The data furnished by these clay documents will now be discussed.

In 1882 Professor T. G. Pinches published a cuneiform text belonging to the British Museum.² This record (Fig. 11) is known as the *Nabonidus Chronicle* because it contains an annalistic account of events in the reign of Nabonidus who ruled as king of Babylon 556-539 B.C. It states that Nabonidus spent the seventh, ninth, tenth, and eleventh years of his reign at a city called *Tēmā*, while the heir to the throne, the princes, and his troops were in the land of Akkad, i.e., Babylonia. This crown prince, designated by the title "the son of the king," was *Bēl-šar-uṣur*, the Biblical Belshazzar. Until recently scholars were mainly of the opinion that the *Tēmā* where Nabonidus spent a large part of his reign was located in Babylonia.³ It has been proven now that *Tēmā* in Arabia, the ancient city described above, was the scene of Nabonidus' unusual sojourn.⁴ All the evidences in favor of this view cannot be presented in this brief article, but reference should be made to three other cuneiform texts which are important links in the chain of demonstration.

A Babylonian contract tablet belonging to Goucher College contains a decisive clue.⁵ This clay document (Fig. 12) is diminutive in size but extremely important in contents. It states that a man was provided with flour and a camel⁶ in order that he might make a journey from Babylonia to the land of *Tēmā* in the fifth year of Nabonidus' reign, thus indicating that Babylonia was interested in the land of *Tēmā* early in that sovereign's period of rule. Desert terrain had to be crossed in making the journey and the amount

¹ That Arabia was controlled by the Persians in the reign of Cyrus following the Neo-Babylonian period is indicated by an article entitled "The 'Shalamians' of Arabia" published by Professor Langdon in *The Journal of the Royal Asiatic Society*, 1927, pp. 529-533.

² *Transactions of the Society of Biblical Archaeology*, VII, pp. 139-176. Additional publications of the text appear in *Keilinschrifliche Bibliothek*, III, 2, pp. 128 ff.; *Beiträge zur Assyriologie*, II, pp. 214-225; 235-257; Sidney Smith, *Babylonian Historical Texts*, pp. 98-123; Plates XI-XIV.

³ Hommel on p. 192 of the first part of *Ethnologie und Geographie des alten Orients* published in 1904 connects Nabonidus' absence from Babylon with a stay at *Tēmā* in Arabia, but suggests that he was interned there on account of insanity. Cuneiform texts furnish no basis for the view that Nabonidus was exiled from Babylonia for any reason whatsoever.

⁴ See *Journal of the American Oriental Society*, XLI, p. 458 f; XLII, pp. 305-316; Dougherty, *Archives from Erech, Time of Nebuchadrezzar and Nabonidus* (1923), p. 35; Sidney Smith, *op. cit.*, pp. 27-97. ⁵ Dougherty, *op. cit.*, p. 34 f.

⁶ In *ibid.*, p. 34, the cuneiform characters were translated "road donkey." Reliable observers in Arabia have praised the ass as "hardly less than the camel as a beast of the desert" and "no whit the inferior of the camel in endurance of thirst." See Dougherty, *op. cit.*, I, pp. 69 and 281; Philby, *The Heart of Arabia*, I, pp. 12 and 44. However, the cuneiform signs on the tablet clearly represent the camel, which adds importance to this document upon clay. The necessary correction has been made in Dougherty, *Nabonidus and Belshazzar*, p. 116. *Ibid.*, pp. 105-160, contains a full discussion of Nabonidus' stay at *Tēmā*.

of food issued to the traveler shows that the destination was distant.

A cuneiform record (Fig. 13) in the Yale Babylonian Collection, dated in the tenth year of Nabonidus' reign, provides further light of a definite character.¹ It indicates that a man, by means of a camel belonging to a Babylonian temple in Erech, conveyed food from the temple to Nabonidus in the land of *Tēmā* in that year.² This document is in reality a contract recorded for the purpose of protecting



FIGURE 12. RECORD OF A JOURNEY TO THE LAND OF *Tēmā* IN THE FIFTH YEAR OF NABONIDUS' REIGN



FIGURE 13. RECORD OF FOOD SENT TO NABONIDUS IN THE LAND OF *Tēmā* IN THE TENTH YEAR OF HIS REIGN. CLAY TABLET IN THE YALE BABYLONIAN COLLECTION

the temple against the sale of the camel by the one who was commissioned to take the food to *Tēmā*. However, the main revelation of the inscription lies in the fact that it shows that Babylonian temples contributed food for royal consumption in *Tēmā* and at the same time furnished transportation by camel to that land. So perfectly does this fit into the situation suggested by the *Nabonidus Chronicle* and the Goucher Tablet that the three texts taken together prove with finality that Nabonidus had his court at *Tēmā* during an extended period of time.

¹ Dougherty, *Records from Erech, Time of Nabonidus* (1920), Text No. 134, translated in Dougherty, *Nabonidus and Belshazzar* (1929), p. 114 f.

² The important part of this text is the indication that the king, i. e., Nabonidus, was in the "land" of *Tēmā* in the tenth year of his reign. The *Nabonidus Chronicle* asserts that he was in the "city" of *Tēmā* in that year. The Yale tablet's reference to the "land" of *Tēmā* points definitely to the well-known district by that name in Arabia. A settlement called *Tēmā* or *Teimah* is located at the northern edge of the Druze Mountains in the Hauran district about sixty-five miles east of the Sea of Galilee. No evidences that this *Tēmā* ever had any importance are at hand. That the region in which it is located was known as the "land" of *Tēmā* cannot be proved by any reference in extant literature. On the other hand, the territory in Arabia in which ancient *Tēmā* prospered and where modern *Teima* exists was known as the "land" of *Tēmā*. See Isaiah xxi: 14. Cf. references in note 1, p. 312. The Goucher text also mentions the "land" of *Tēmā*.

Another text of the British Museum, published by Sidney Smith in 1924, serves as a keystone to this arch of proof.¹ The obverse of this tablet is reproduced in Figure 14. The second column contains a passage which informs us that Nabonidus, after entrusting governmental affairs in Babylonia to his eldest son, *i. e.*, Belshazzar, made a campaign against *Tēmā* from the region of Syria in the third year of his reign.² In this text *Tēmā* is described as an extremely distant locality. It was attacked and subdued by Nabonidus who then made it his residence. The city was glorified by him until it equaled the palace of Babylon in attractiveness. The circumstantial char-



FIGURE 14. OBVERSE OF THE RECORD WHICH STATES THAT NABONIDUS CAPTURED THE CITY OF *Tēmā*

acter of the narrative and its obvious historical significance stress the importance of the inscription for the period under discussion. Nabonidus' sojourn at *Tēmā* is revealed as more than a transient episode in his career. It was in truth the distinctive political phenomenon of his reign. The city of *Tēmā* where he dwelt and in which he showed kingly interest must be accorded much greater prestige than former data had implied.

Although it is unexpected that a Babylonian king should have established his court so far away from the capital of his empire, there

¹ Sidney Smith, *op. cit.*, 27-97. Smith calls the inscription "A Persian Verse Account of Nabonidus."

² *Ibid.*, p. 88 f. Olmstead believes that Nabonidus' attack upon *Tēmā* occurred in the fourth year of his reign. See *A.J.A.*, XXXIV, p. 275. The text to which he refers is important though fragmentary, but it is by no means certain that it supports his view.

is positive basis for the belief that the *Tēmā* specified in the cuneiform inscriptions which have been discussed and the Teima in Arabia whose archaeological remains have been described are identical. The inscriptions of Tiglathpileser III of the eighth century B.C. link the inhabitants of *Tēmā* with other Arabian peoples.¹ There is no possibility, therefore, of disassociating the *Tēmā* of the Nabonidus inscriptions from the Arabian city by that name. That it existed for a time as a Babylonian city is indicated by all the evidence now at our disposal. Furthermore, although no extensive investigations have been carried on in its débris and although no Babylonian antiquities have been found in its superficial remains, its extreme importance in ancient times has been demonstrated.

What might not the spade of the excavator reveal at Teima if a scientific expedition could be maintained there for a sufficient period of time? The prospect is most alluring to the archaeologist. Unfortunately the recovery of antiquities buried at Teima would be an exacting and dangerous task on account of the following serious difficulties: (1) Approach to Teima would be attended by extreme hazard. Musil, who attempted unsuccessfully to reach the site in 1909, states that the desert paths leading to Teima are known as *durūb al-mawt*,² "roads of death." (2) The dwellers at the oasis are reputed as being unfriendly to long stays on the part of foreigners.³ (3) According to Huber excavations at Teima would be resisted by the inhabitants on account of extensive Arab burials.⁴ These obstacles do not minimize the value of Teima as an archaeological site. The gain would be all the greater if its antiquities could be unearthed and placed at the disposal of the world's scholars. That such an achievement would throw much light upon events in southwestern Asia during the sixth century B.C. can hardly be questioned.⁵

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¹ *Keilschriftliche Bibliothek*, II, p. 20, line 53; Delitzsch, *Wo lag das Paradies?* p. 301 f.

² Musil, *Arabia Deserta*, "Oriental Explorations and Studies" of the American Geographical Society, No. 2, p. 143.

³ Huber, *op. cit.*, p. 382 f. Jausseen and Savignac, *op. cit.*, II, p. 150 f, present a more favorable view of the situation.

⁴ Huber, *op. cit.*, pp. 378 and 383.

⁵ Figures 11 and 14 are published by permission of the British Museum and figure 12 by permission of Goucher College. Figures 12 and 13 represent the actual size of the tablets, whereas figures 11 and 14 represent the tablets reduced about one-fourth in size.

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STUDIES OF THE EXPLOITS OF HERAKLES ON VASES¹

II. THE THEFT OF THE DELPHIC TRIPOD

ONE of the vases found during the excavations at Corinth is a small black-figured lekythos, crudely drawn, showing Herakles carrying off the tripod, with Apollo seeking to restrain him. Up to the recent campaign of Professor Shear, this was the only vase found at Corinth with a subject which could be readily identified with a definite episode in Greek mythology. It is now in one of the storehouses of the Museum of Old Corinth.

This lekythos (Fig. 1) was found in the excavations of Messrs. Hill and Dinsmoor in 1916; it came from their Tomb 52, and bears the inventory number CP 796. It is intact and in perfect preservation; the neck is unduly long, the mouth, of the inverted bell shape. It has a height of 15.5 cm. and a diameter at the shoulder of 4.8 cm.²

The design (Fig. 2), in black figures on a white ground, shows the Theft of the Delphic Tripod by Herakles. The hero, nude, strides to the right. He is bearded and looks back to the left. In his left hand is his club, which he brandishes in a threatening manner; with his right hand he grasps the tripod. He is closely pursued by Apollo, who is dressed in a short chiton, stopping at the knees, and wears a garland on his head. Apollo has seized the tripod with both hands, in an attempt to take it away from Herakles. Behind the god, Artemis appears, facing the right, her left hand outstretched; she wears a long chiton and himation. All these three figures move towards Athena, who is at the right of the scene, seated in a chair facing left, and identified by her helmet, but clad in a chiton and himation like Artemis.



FIGURE 1. BLACK-FIGURED LEKYTHOS, OLD CORINTH

figures move towards Athena, who is at the right of the scene, seated in a chair facing left, and identified by her helmet, but clad in a chiton and himation like Artemis.

¹ See *A.J.A.* XXVIII, 1924, pp. 296-325.

² Both photograph and drawing (figs. 1 and 2) are the work of Miss Mary Wyckoff of the American School at Athens.

The drawing, as will be seen, is careless and poor, more like a caricature than a serious portrayal, and the vase is of the common, cheap kind frequently found in tombs of the early fifth century. Its importance, if it can be said to have any, lies in its solitary position as a mythological subject among the vases found at Corinth before 1926, and as an excuse for the writer to bring out a new list of vase-paintings showing this subject,—no such attempt having been made since Overbeck's *Kunstmythologie* in 1889, and the article of Stephani in the *Compte-Rendu de St. Pétersbourg* for 1868.

Although this is one of the most popular subjects to be found on vases, and unlike many of the exploits of Herakles almost as common

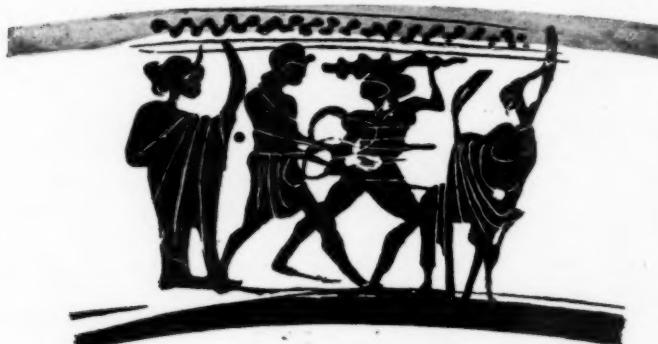


FIGURE 2. DISPUTE OF THE TRIPOD: DESIGN FROM LEKYTHOS, OLD CORINTH

to the red-figured as to the black-figured styles, it is very rarely alluded to in contemporary literature, and our best source is Apollodorus.¹ The earliest instance that I could find where this story may be referred to is in Pindar, *Ol. IX*, 43, where the poet speaks as follows:

ἐπεὶ ἀντίον
Πῶς ἀν τριόδοντος Ἡρακλέης σκύταλον τίναξε χερσίν
ἀνικ' ἀμφὶ Πύλων σταθεὶς ἥρειδε Ποσειδᾶν,
ἥρειδεν δὲ νῦν ἀργυρέῳ τόξῳ πολεμίζων
Φοῖβος . . .

The mention of Herakles fighting with Apollo is interpreted by the Scholiast as referring to the contest for the tripod, which is generally accepted by the editors.² But apart from Pindar, I find

¹ *Bibl. II*, 130 f.

² So, e.g., Gildersleeve, and Sandys in the Loeb Classical Library.

no reference in early literature to this feat of the hero.¹ This ode is variously dated; it is probably not earlier than the 78th Olympiad (468 B.C.) nor later than the 81st (456 B.C.), and is, therefore, later than the black-figured vases, and contemporaneous with the best red-figured that show the subject.

All the later accounts—Apollodorus, Pausanias² and Hyginus³—concur in putting this exploit of the hero after he had performed his twelve labors for Eurystheus. Upon their completion, he returned to Thebes, and shortly sought the hand of Iole, daughter of Eurytos in Euboea. According to Apollodorus this episode follows upon his rescue of Alcestis from Hades. The net result of his relations with Eurytos was the slaying of the latter's son Iphitos, to whom he was bound by the tie of *ξενία*, as a result of which he was afflicted with madness⁴ and a dread disease. To be purged of these, he went to Pylos, seeking the intervention of Neleus, the king of that region; repulsed there on account of friendship existing between Neleus and Eurytos, he went to Amyklai, where Deiphobos, the son of Hippolytos, purified him of his crime, and restored his reason. But he still was afflicted with the sickness, and to be released from disease he went to Delphi. On the refusal of the Pythian priestess to give him an oracle on this point, he seized in his rage upon the Delphic tripod, with the design, as Apollodorus says, of carrying it off and setting up an oracle of his own. Apollo forthwith interfered to protect his shrine, and the god and the hero fought for possession of the tripod until separated by a thunderbolt from Zeus, when a compromise was reached; the tripod was restored to Apollo, but an oracle was given to Herakles that to obtain a cure, he must serve three years as a slave and pay compensation to Eurytos for his son's murder. It is at this point that he goes to serve Queen Omphale of Lydia.

The account of Pausanias⁵ agrees in the main with that of Apollodorus, but brings in a tradition that is obviously late. For when Herakles carried off the tripod, the Pythian priestess, to whom the name Xenoclea is given, is made by Pausanias to remark: "So Herakles of Tiryns is a different person from him of Canopus." For," continues the writer, "the Egyptian Herakles had come to Delphi before."

This tradition appears obviously to be late, at a time when an attempt was made by logicians to classify and bring order out of

¹ Although Pausanias (X, 13, 8) says "the poets have taken up this story."

² X, 13, 7.

³ Fab. 32.

⁴ The vases showing the slaughter of Iphitos have been assembled by Miss Richter in *A.J.A.* XX, 1916, pp. 128-131.

⁵ X, 13, 7 and 8.

the more or less incongruous mass of folk-tales which formed the mythology of Hellas, and as certain Herakles legends seemed to be inconsistent with others, to assign them to another hero of the same name.¹ The principal authority for this school is Cicero,² who distinguishes no less than six heroes named Herakles, and assigns this exploit to his first one, the son of Jupiter and Lysithoe. The trouble then is that he is logically compelled to recognize at least three different gods, all named Jupiter or Zeus, and therein madness lies.

The only other important variant in the myth is that of Hyginus,³ who declares that the theft of the tripod followed upon the murder by Herakles of his wife Megara and his sons, after he had been maddened by his arch-enemy Hera.⁴ After coming to his senses, he went to Delphi to be purged of his crime,—and the rest of the story follows Apollodorus. This again must be regarded as a late abbreviation of the original myth. And, in fact, it seems to me best to follow the belief that there was only one Herakles and that to him should be assigned the various feats. It is true that, in order to render them comprehensible to the Greeks, local Egyptian and Tyrian divinities were given at very early times the name of Herakles—but none of the deeds depicted on the vases was ever credited to them.

Still other less important variants exist. One, quoted by Plutarch⁵ relates that Herakles did not return the tripod to Apollo, but carried it to Pheneus in Arcadia, in revenge for which the plain of Pheneus was flooded by the vindictive god—but not until Plutarch's time. But Pausanias,⁶ who is later than Plutarch, describes this region as a plain, showing that the waters had subsided, and he does not refer to the Delphic tripod having been brought to Pheneus by Herakles.

Another myth carries us to Laconia, where Pausanias⁷ tells us that the inhabitants of Gytheion, the seaport of Sparta, believe that their city was founded by Apollo and Herakles together after they had become reconciled after the theft of the tripod and its restoration. Pausanias saw in the market-place at Gytheion statues of Apollo and Herakles to bear out the local tradition, and later in this investigation we shall see a vase which shows the reconciliation of the two divinities.

¹ As in the classic remark of the school boy: "The *Odyssey* was not written by Homer, but by another man of the same name!"

² *De Natura Deorum* III, ch. 16, 42. See also Diodorus I, 74.

³ *Fab.* 32.

⁴ This is, of course, the subject of the *Herakles* of Euripides.

⁵ *De sera numinis vindicata*, 12. See Frazer's *Pausanias*, vol. IV, pp. 231-233.

⁶ VIII, 14.

⁷ III, 21, 8, and Frazer's note, vol. III, p. 378.

Various scholars have attempted to see in this myth suggestions of a conflict between earlier and later cults; and in this connection much has been made of Apollodorus' statement that in taking the tripod Herakles wished to set up an oracle of his own and of a remark of Plutarch¹ that after he grew up he became expert both in divination and in logic, and seized on the tripod and contended with Apollo for the preëminence in this art. Some believe it to epitomize a struggle between the cults of Herakles and Apollo for the possession of Delphi;² others that it is more than that: namely, a struggle for supremacy in Greek religious thought;³ while others again consider that the story should be explained as developing out of cult relationships of Central Greece. These scholars⁴ see in Herakles the original owner of the Delphic oracle, and contend that his theft of the tripod consists of the final absorption of the Delphic cult by Apollo, and the desire of Herakles to establish his oracle elsewhere; and it is true that at one time the Theban Herakleion vied with Delphi as an oracular shrine. Furtwängler in particular makes much of the fact that Herakles in the vase paintings is often either nude or not wearing the lion's skin, which he claims supports this view of the earlier cult, but this can be explained in a less far-fetched manner.

Another explanation is given by the writers of Daremburg-Saglio,⁵ who see in it a story to give a reason for certain attributes of Herakles which strikingly recall those of Apollo. "Héraklès," they say, "est comme Apollon un dieu solaire; tous deux combattent avec l'arc sur les plus anciens monuments; Apollon est le dieu-prophète, et le don prophétique est aussi attribué à Héraklès, aux moins dans certaines traditions locales. Que le trépied soit simplement le symbole de la prophétie." This is also suggested by Furtwängler, but from it he draws a different conclusion.

If I should be asked to decide which of these theories I prefer, my answer would be that I do not seek to find some recondite explanation in the story,—some epitome of the struggle of Fundamentalism vs. Modernism in antiquity,—but I accept the myth at its face value, and I do not find it inconsistent with the numerous other stories of Herakles that have come down to us. Nearly all of them reveal our hero as a creature of impetuous action and high

¹ *De EI apud Delphos*, 6. I use the Goodwin edition (IV, p. 484).

² So E. Curtius, *Ges. Abhandlungen*, II, 215–224; Wilamowitz in his edition of the *Herakles* of Euripides, 2nd edition, vol. I, p. 14, note 29.

³ So Overbeck, *Kunstmythologie*, Apollon, p. 391 f.; Wernicke in Pauly-Wissowa, II, s.v. *Apollon*.

⁴ Reisch in Pauly-Wissowa, s.v. *Dreifussraub* (V, 1681); Furtwängler in Roscher's *Lexikon*, s.v. *Herakles*, I, 2213.

⁵ *Dictionnaire*, s.v. *Hercules*, vol. III, part 1, p. 109 f.

temper, both of which qualities are abundantly here shown. That it is a very ancient myth is amply testified by the vases to be listed below, and this very fact, it seems to me, is sufficient reason for us not to try to read into it meanings or suggestions which, I venture to believe, would have surprised the ancient Greeks. Had it been found only on later monuments, we should be at greater liberty to do so. I, therefore, am inclined to reject all the theories quoted above, and to nail my colors to the mast of Apollodorus, in seeking no ulterior explanation of the reason for the story, but considering it as one of many myths of the life of the most interesting of all Greek heroes. Were I required, however, to select one and adhere to it, I should consider that the passage quoted above from Daremberg-Saglio comes closer to the truth than any other.

Before taking up those monuments left to us which depict this myth, it may not be amiss to discuss monuments, known by literary references, which are now lost. First in importance comes the group at Delphi set up by the Phocians and described by Pausanias.¹ "There is a group," he says, "representing Herakles and Apollo, both grasping the tripod, and about to fight for it. Leto and Artemis are trying to soothe the rage of Apollo, and Athena is doing the same by Herakles. This is another offering of the Phocians, made by them at the time when Tellias the Elean led them against the Thessalians."² The Athena and Artemis are by Chionis, the other figures of the group are the joint work of Diyllos and Amyclaeus; all three artists are said to be Corinthians." This group is now lost, but it can be reconstructed on the analogy of the early vases; the tripod was undoubtedly upright in the centre, and on either side were Apollo and Herakles with their partisans behind them. It is in connection with this group that Pausanias narrates his version of the story, to which reference has already been made.

Another lost monument was at Lycosura and is also described by Pausanias,³ who gives an account of the sanctuary "of the Mistress" at that place. "On the way to the temple there is a colonnade on the right, with reliefs in white marble on the wall,—the second represents Herakles wresting the tripod from Apollo."

As is well known, extensive and important excavations were conducted at Lycosura by the Greek archaeologists Kavvadias and Leonardos in the late eighties and early nineties of the last century,

¹ X, 13, 7. For notes on this passage, see Frazer, vol. V, p. 297 f., who quotes a number of early interpretations of the myth, to which I have not referred, as they are surely to be rejected. I use Frazer's translation, vol. I, p. 518.

² See also Herod., VIII, 27, for an account of this campaign.

³ VIII, 37, 1. Notes in Frazer's *Pausanias*, vol. IV, p. 367 f. I use Frazer's translation.

and this very colonnade was laid bare in 1895—but, alas! this relief was not preserved, or at least not in such shape that it can be restored, though doubtless some of the small fragments in the museum at Lycosura may belong to it.

In discussing those extant monuments which deal with our story, I shall pass rapidly over the various reliefs, bronzes, gems and other objects of minor art, and devote my attention principally to the vases. I do not guarantee that my list of objects other than vases is exhaustive; I do claim, however, for my list of vases a certain measure of completeness. Many new examples have come to light since the last list, that of Overbeck,¹ was published in 1889, and his list, even at that time, was not as complete as it might have been.² In accordance with this scheme, therefore, I shall first take up the non-ceramic monuments, beginning with sculpture.

First in importance in extant works of this kind is, of course, the pedimental group of the Siphnian Treasury at Delphi,³ which is familiar to most of the readers of this paper. It is now in the Museum at Delphi, set up in the restoration erroneously called the Treasury of the Knidians and made up of parts of the Knidian and Siphnian treasures.⁴ A cast of this restoration has been set up in the Louvre. Athena stands in the centre of the gable, and appears to intervene between the two combatants, of whom Herakles is at the right and Apollo at the left. Behind Apollo are two female figures identified by Frazer⁵ as Leto and Artemis. On the other side of Herakles are two other female figures. Then come, on either side, the chariots of the deities with their chariooteers and other unidentifiable figures.

A curious feature of this pedimental group is the combination of relief technique and sculpture in the round employed, the lower parts of the figures being in relief, the upper parts in the round. This method proves the early date of the group in pedimental sculpture, which is borne out by the archaic stiffness of the poses. It is one of the earliest pedimental groups we possess, and as such is of importance, out of proportion to its artistic merit. It is dated in the second half of the sixth century, about 525 according to Dinsmoor,

¹ *Kunstmythologie*, Apollon, p. 391 f.

² Besides Overbeck, lists were drawn up by Stephani (*Compte-Rendu de St. Pétersbourg*, 1868 (list used by Frazer, *Pausanias*, V, p. 297 f.), Gerhard (A.V., text, vol. II, pp. 146–48, notes 16–18) and Welcker (*Alte Denkmäler*, III, pp. 268–285). Overbeck uses the lists of Stephani and Welcker, but seems to ignore that of Gerhard.

³ *Fouilles de Delphes*, vol. IV, fasc. 1, plus XVI, XVII. Poulsen, *Delphi*, pp. 109–111, fig. 36. Bourguet, *Les Ruines de Delphes*, pp. 76–78, fig. 24.

⁴ For the proper interpretation of the fragments from the point of view of architecture, see Dinsmoor, *B.C.H.* XXXVI, 1912, pp. 439–493, XXXVII, 1913, pp. 5–83.

⁵ *I.c.*, V, p. 274.

and shows close similarity to the representations on the black-figured vases. Important to note is the fact that Herakles is walking off with the tripod, while Apollo is trying to take it away from him.

Only one other piece of sculpture need concern us. This is a relief on a base for a candelabrum or tripod, now in the Albertinum at Dresden.¹ This is one of the most famous examples of the so-



FIGURE 3. RELIEF IN PHILADELPHIA. CONSECRATION OF THE RESTORED TRIPOD

called "Neo-Attic" archaic school of sculpture of the Hellenistic or Graeco-Roman epoch. It has reliefs on all three of its sides: the central one shows Herakles carrying off the tripod with Apollo in protest; the second side shows a priest and priestess consecrating a tripod, possibly intended to be the restored Delphic tripod; and the third, similar figures consecrating an object resembling a torch. Many replicas of this relief exist, especially of the principal subject: while I am fortunate in being able to publish one of the most beau-

¹ Brunn-Bruckmann, *Denkmäler*, pl. 150. Friederichs-Wolters, *Gipsabgüsse*, 423. A.Z. 1858, pl. 111. There is a cast in the Metropolitan Museum in New York.

tiful, a relief of the consecration of the tripod, now in the Museum of the University of Pennsylvania in Philadelphia (Fig. 3).¹

LIST OF SCULPTURE

A. In stone.

1. Pediment Group of Siphnian Treasury, Delphi.
2. Three-sided base in Dresden. Stephani 77, Overbeck B¹.
- 2a. Replica of above in Villa Albani, Rome. Stephani 83, Overbeck B³.
- 2b. Replica in Berlin. Fragmentary. Stephani 78, Overbeck B⁴.
3. Formerly in Venice. Stephani 80, Overbeck B².
4. Louvre. Much restored. Stephani 79, Overbeck B⁵.
5. Vatican. Stephani 82, Overbeck B⁶.
6. Vatican. Candelabrum base. Much restored. Stephani 81, Overbeck B⁷.
7. Once in a private house in Velletri, now? Stephani 84, Overbeck B⁸.

B. In bronze.

8. Plaque from Olympia, Curtius-Adler, *Olympia*, pl. XXXIX, 704. Overbeck A¹.
- 9, 10, 11. Bronze Plaques from Dodona. Carapanos, *Dodone et ses Ruines*, pl. 16, 1, p. 33, nos. 2, 3, 4, Overbeck A², ³, ⁴.

C. In terracotta.

12. Louvre, Reinach, *Répertoire des Reliefs* II, p. 250. Stephani 87, Overbeck C¹.
- 13, 14. Fragments of two replicas in Munich. Stephani 85, 96. Overbeck C², ³.

It will next be convenient to take up the gems that show this subject. This list does not pretend to be complete, but gives the examples enumerated by Overbeck with a few others of more recent publication, readily accessible. I am sure that there must be others unknown to me, but as my preoccupation is with the vases, I have made no effort to find them.

1. Leningrad. Stephani, *Compte-Rendu*, 1868, pl. I, 4. Overbeck a.
2. Formerly Corazzi coll., Cortona. Overbeck b.
3. Once in possession of Vescovali, now? Overbeck γ.
4. Once in Pourtalès coll. Overbeck δ.
5. British Museum 620. Furtwängler, *Antike Gemmen*, pl. VIII, 9.
6. Bibliothèque Nationale. *Ibid.*, pl. X, 18.
7. The Hague. *Ibid.*, pl. VIII, 8.
8. Boston. *Ibid.*, pl. VI, 46. Beazley, *Levett House Collection*, p. 10, no. 14, and pl. 2.
9. Lost. Furtwängler, *l.c.*, pl. VIII, 40,

Of doubtful application:

10. Boston. Beazley, *l.c.*, p. 44, no. 49, pl. 3. (Shows Apollo alone, but resembles closely no. 6 above, so may be an abbreviated representation.)
11. British Museum 1150. Similar.

¹ Luce, *Catalogue of the Mediterranean Section*, p. 170, no. 18. E. H. H(all). (now Mrs. J. M. Dohan), *Museum Journal*, V, 1914, pp. 26-28, fig. 15. Mentioned, *A.J.A.* XVIII, 1914, p. 416. Another replica of this side is in the Hermitage: see Stephani, *Compte-Rendu*, 1868, p. 51, note 3.

The only other objects other than vases to show this subject are silver coins of Thebes¹ and Lycia² and bronze coins of Samos of the period of the emperor Commodus.³ Of this last, the references given by Overbeck were not accessible to me, but apparently both Herakles and Apollo are represented; whereas in the two silver coins Herakles alone is shown, carrying off the tripod.

In coming finally to the vases, we find two distinct groups. In the first, which is usually considered the earlier of the two, the tripod stands upright in the middle of the composition, with Herakles on one side and Apollo on the other, each pulling at it, followed by their supporters, as in the lost group at Delphi. The second and far more numerous group shows Herakles carrying off the tripod. Sometimes he is alone, more often pursued by Apollo, while in the majority of cases Artemis supports Apollo, and Athena, Herakles.

The lists of Stephani and Overbeck, while of use in their time, are now obsolete. In this investigation it has been possible almost to double the number of examples listed by Overbeck, the latest and most complete up to the present. It may well be, however, that in some instances I have listed vases twice, as some of the vases "once in Basseggio's possession" or "formerly in the Depoletti collection," may have found their way into museums and been so listed. In any case, I have tried to include all I knew about, and, if my list errs, it errs on the side of over-completeness. It is submitted herewith in the hope that it may prove of some use, and enable some of the lost examples to come to light once more, through the researches of other scholars.

At the end of the main list will be found several other groups of vases. First will come a list of those examples which it is impossible to assign to their various categories. This will be followed by some vases that have been erroneously, as I believe, interpreted as presenting this subject. Then will follow a small group which seems to represent Herakles returning the tripod to Delphi; and finally a very interesting vase which has usually been interpreted as showing the reconciliation of the god and the hero.⁴

Group I. The tripod is usually upright in the centre. The two

¹ B. M. Cat. Central Greece, pl. XII, 6.

² Fellows, Coins of Lycia, pl. XV, 1.

³ See Overbeck, l.c., p. 407, b.

⁴ The following data will be necessary to understand some of the abbreviations used. For the vases in Athens, the prefix C.-C. before a number refers to the catalogue of Collignon and Couve. For the museums of Berlin, Naples, Lenigrad, and Würzburg, the numbers refer to the catalogues of Furtwängler, Heydemann, Stephani and Urlichs, respectively. Other abbreviations are: C.V.A., *Corpus Vasorum Antiquorum*; A.V., Gerhard, *Auserlesene Vasenbilder*; Hoppin, B.F., Hoppin, *Handbook of Greek Black-Figured Vases*; Hoppin, R.F., Hoppin, *Handbook of Attic Red-Figured Vases*; A.Z., *Archaeologische Zeitung*.

combatants are on either side of it, each endeavoring to pull it towards himself. This type, which might be called the "tug-of-war type," is usually considered the earliest, as it contains practically all the non-Attic examples. At the end of this group, as a sort of link connecting it with the second and more usual group, is an interesting variant—the tripod has been lifted from the ground, but Herakles and Apollo are still facing each other and tugging at it, Herakles not having yet succeeded in wresting it from Apollo.

Group I, A. Herakles and Apollo. No onlookers.

Black-figured.

Amphorae:

1. Museum of Corneto-Tarquinia. Signed by Nikosthenes as potter. Hoppin, *B.F.*, pp. 196-7, no. 14.¹
2. Archaeological Museum, Leipzig. Overbeck, 39.
3. Vatican, Helbig, *Führer*, 1912 ed., I, p. 299, 467 (44). Stephani, 41, Overbeck, 37.

Krater:

4. Formerly in Depoletti coll., now lost. Stephani, 53, Overbeck, 38.

Fragments:

5. Louvre, room M.
6. Tübingen, C19 (Boeotian kantharos). Watzinger, pl. II.

Group I, B. Various onlookers. All black-figured.

7. Kylix in Munich, Jahn 548. Athena and Artemis. Stephani, 13, Overbeck, 40.
8. Amphora in Corneto-Tarquinia. Two draped spectators.²
9. Chalcidian skyphos in Naples, SA120. Rumpf, *Chalkidische Vasen*, pls. CLXXI-CLXXIV. Athena, Hermes and Artemis. Overbeck, 43.³
10. Once in Campana coll. (VIII, 74), now probably in the Louvre. On either side, three onlookers. Stephani, 28, Overbeck, 41.⁴

Group I, C. Variant. The tripod has been lifted from the ground to a horizontal position, and the combatants still seem equally matched, the "tug-of-war" motive being continued.

Black-figured.

11. Amphora in Boston, 01.8027, signed by Amasis as potter. Hermes stands between Apollo at left and Herakles at right. Hoppin, *B.F.*, pp. 30-31, no. 2*.

¹ It is only fair to state that this vase is often rejected, and believed to represent two athletes boxing for a tripod as a prize. This may be the correct interpretation.

² This also may be considered doubtful, and may represent athletes competing for a prize of a tripod.

³ This vase and the fragment in Tübingen are probably the earliest vases to show this subject.

⁴ I have not been able to identify this with any of the Louvre vases, and it is well known that many objects from the Campana collection have been placed in various of the French provincial museums, so it may not be in the Louvre at all.

Red-figured.

12. Kylix in Munich, Jahn 401, present no. 2590, signed by Phintias as painter.
No onlookers. Hoppin, *R.F.*, II, pp. 362-63, no. 6*. Stephani, 62.
Overbeck, 3 (64).

Group II. In this group, which includes the greater number of examples, Herakles has succeeded in wresting the tripod from Apollo. The group can be subdivided, according to the number of onlookers. Herakles carries off the tripod either on his shoulder or under his arm; he is pursued closely by Apollo, who grasps at the sacred object, while Herakles threatens him with his club. In one small group of vases Apollo does not appear, and as these vases are mostly late, they have been put at the end. On red-figured amphorae a common arrangement is to have Herakles with the tripod on the obverse, and Apollo in pursuit on the reverse.

Group II, A. Herakles and Apollo. No onlookers.

Black-figured.

Amphorae:

13. Berlin 1836. Stephani, 4, Overbeck, 3.
14. Berlin 1853. Stephani, 5, Overbeck, 31.
15. Munich, Jahn 452. Stephani, 12, Overbeck, 8.
16. Munich, Jahn 1198. Stephani, 18, Overbeck, 4.
17. British Museum B233. *C.V.A.*, British Museum, fasc. 4, pl. 54, 3a-b.
18. Museum of Palermo. Said to come from Gela.¹
19. Paris, Louvre F242. *C.V.A.*, Louvre, fasc. 4, pl. 48, 2, 5. Stephani, 26,
Overbeck, 6.
20. Paris, Louvre F401. Stephani, 24, Overbeck, 45.
21. Paris, Musée Guimet.
22. Leningrad, Hermitage 131. *A.V.*, 193. Stephani, 2, Overbeck, 1.
23. Formerly in Canino coll. (*Res. Etr.*, 22). Stephani, 39, Overbeck, 55.
24. Formerly in Basseggio coll., now lost. Stephani, 47, Overbeck, 58.
25. Formerly in Basseggio coll., now lost. Stephani, 48, Overbeck, 10.

Pelike:

26. British Museum B190. *C.V.A.*, British Museum, fasc. 3, pl. 44, 4. Stephani, 44, 49, 55, Overbeck, 44, 57.²

Hydriae:

27. Madrid 69. Leroux, pl. XII, 2.³
28. Naples 2435. Overbeck, 5.
29. Once in Basseggio coll., now lost. Stephani, 46, Overbeck, 11.
30. Formerly in Gerhard's possession. Overbeck, 61.

Kylix:

31. Rome, Villa Giulia. *C.V.A.*, Villa Giulia, fasc. 3, pls. 37, 5 and 38, 1, 2.

¹ From notes taken in Palermo in 1914. This applies also to nos. 94, 95, and 114 of this list.

² This vase, listed in *B. M. Cat.* as once in the Braun coll., is certainly Stephani, 44. Overbeck discovered that Stephani had listed it twice. This proves it was listed by Stephani three times.

³ Beazley has recently named a new black-figured painter, "The Painter of the Madrid hydria," after this vase.

Oenochoae:

32. Brussels, Musée du Cinquantenaire.
33. Munich, Jahn 1117. Stephani, 16, Overbeck, 32.
34. Paris, Louvre F341. Stephani, 29, Overbeck, 9.

Lekythoi:

35. Frankfurt-am-Main, Schaal, pl. 21a.
36. Formerly on Acropolis, Athens, "im Häuschen hinter dem Erechtheion."
Heydemann, *Gr. Vasenm.*, p. 5, note 13, c.

Red-figured.

Amphorae:

37. Museum, Corneto-Tarquinia. Signed by Phintias as painter. Hoppin, *R.F.* II, pp. 356-57, no. 3 *. Overbeck, 2 (63).
38. Florence 3982. Attributed by Beazley (*Att. Vasenm.*, p. 101, no. 17) to the Pan painter. Overbeck, 8 (67).
39. British Museum E318. Attributed by Beazley (*l.c.*, p. 296, no. 2) to the Alkimachos painter. Stephani, 63, Overbeck, 15 (76).
40. Munich, Jahn 5, new no. 2318. Attributed by Beazley (*l.c.*, p. 78, no. 27) to the Berlin painter. Stephani, 61, Overbeck, 7 (68).
41. New York 13,233. Attributed by Beazley (*l.c.*, p. 70, no. 15) to the Kleophrades painter.
42. Museum of Parma. Stephani, 71, Overbeck, 17 (78).
43. Würzburg 319. *F.R.*, pl. 134. Attributed by Beazley (*l.c.*, p. 77, no. 9) to the Berlin painter. Overbeck, 8 (69).

Pelike:

44. Leningrad 1639. Beazley classes this as related to the work of the Nikoxenos painter (*l.c.*, p. 93). Stephani, 59, Overbeck, 4 (65).

Hydria-Kalpis:

45. Coll. of Comte de Saint Ferriol, Uriage, France. *Mon. Piot*, XX, 1912, pl. V.
46. British Museum E458 (Calyx-Krater) attributed by Beazley (*l.c.*, p. 97, no. 2) to Myson. Stephani, 67, Overbeck, 10 (71).
47. Museum of Turin (Celehe). Overbeck, 18 (79).

Kraters:

48. Athens *Inv.* 15201.¹ Found on Acropolis.
49. Athens, Acropolis E13. Fragments of skyphos, attributed by Beazley (*l.c.*, p. 12, no. 11) to Oltos.

Group II, B. Herakles, Apollo and one onlooker.

- a. Artemis. All black-figured.
50. Amphora in Copenhagen, Musée Thorwaldesn 44. Stephani, 3, Overbeck, 34.
51. Stamnos in Paris, Cabinet des Médailles, 251. Stephani, 30, Overbeck, 12.
52. Hydria in the Louvre, F292. Stephani, 54, Overbeck, 47. (Winged Artemis.)
- b. Iolaos. All black-figured.
53. Etruscan hydria in Munich, Sieveking 900, Jahn 984. Stephani, 14, Overbeck, 3.

¹ This I believe to be the same as G114, attributed by Beazley (*l.c.*, p. 156, no. 5) to the Copenhagen painter.

- 54. Lekythos in the British Museum, B528.
- c. Hermes. Red-figured.
- 55. Rhyton in Sarajevo, 102.
- d. Athena.

Black-figured.

Amphorae:

- 56. Leningrad 64. Stephani, 1, Overbeck, 16.
- 57. Paris, Louvre F58. C.V.A., Louvre, fasc. 4, pls. 30, 9 and 31, 3. Stephani, 27, Overbeck, 46.
- 58. Formerly in Rome. A.V., 54. Stephani, 43, Overbeck, 13.
- 59. *Jekyll Sale Cat.*, 26.

Lekythoi:

- 60. Catania, Museo Biscari. Stephani, 56, Overbeck, 15.
- 61. Paris, Cabinet des Médailles 284.
- 62. Once in possession of Prof. Reina, Catania. Stephani, 57, Overbeck, 14.

Red-figured.

Amphorae:

- 63. Rome, Vatican. A.V., 126. Attributed by Beazley (*l.c.*, p. 122, no. 1) to the Troilos painter. Stephani, 73, Overbeck, 11 (72).
- 64. Rome, Villa Giulia (formerly Castellani coll.). Attributed by Beazley to the Berlin painter (*l.c.*, p. 81, no. 65).

Oenochoe:

- 65. Fragment in National Museum, Athens, from Acropolis, F89a. Beazley (*l.c.*, p. 52, no. 2) relates this vase to the Epidromos painter, though not actually by his hand.

Group II, C. Herakles, Apollo, Athena, Artemis.

Black-figured.

Amphorae:

- 66. Boston 98.919. Fragmentary.
- 67. Boulogne 69. Stephani, 31, Overbeck, 50.
- 68. Compiègne 974. C.V.A., Compiègne, pl. 6, no. 4. Stephani, 36, Overbeck, 7.
- 69. Corneto-Tarquinia.¹
- 70. Corneto-Tarquinia.
- 71. Corneto-Tarquinia.
- 72. British Museum B195. C.V.A., British Museum, fasc. 3, pl. 37, 2, a and b. Stephani, 38, Overbeck, 25.
- 73. Munich, Jahn 103. Stephani, 10, Overbeck, 21.
- 74. Munich, Jahn 178. Stephani, 11, Overbeck, 22.
- 75. Paris, Louvre F231. C.V.A., Louvre, fasc. 4, pl. 44, 1-3. Stephani, 25, Overbeck, 23.
- 76. St. Louis, City Art Museum. Furtwängler, *Münch. Sitzber.*, 1905, II, p. 243, no. 5.
- 77. *Castellani Sale Cat.*, 1884, no. 60.
- 78. Formerly in Depoletti's possession. Stephani, 52, Overbeck, 59.

¹ This and the next two vases are listed from notes taken at Corneto in 1914. No. 69 is one of the finest black-figured vases I have ever seen, and I would without question give it to Exekias.

Celebae:

79. New York 07.286.76. In addition to Athena and Artemis, their chariots and charioeteers are also shown.

80. Paris, Louvre F312. *C.V.A.*, Louvre, fasc. 2, pls. 4, 9, and 5, 3.

Hydriæ:

81. Munich, Jahn 58. Stephani, 8, Overbeck, 20.

82. Munich, Jahn 60. Stephani, 9, Overbeck, 24.

83. Paris, Louvre F293. *C.V.A.*, Louvre, fasc. 6, pl. 70, 3. Stephani, 23, Overbeck, 49.

Kylix:

84. Munich, Jahn 1028. Stephani, 15, Overbeck, 17.

Oenochoæ:

85. Brussels, R298. *C.V.A.*, Brussels, fasc. 1, pls. 5, 7 a-b, 6, 6.

86. Munich, Jahn 1186. Stephani, 17, Overbeck, 18.

87. *Magnoncour Sale Cat.*, 43. Stephani, 33, Overbeck, 51.

Lekythoi:

88. Athens C.-C. 910.

89. Berlin 1963. Overbeck, 52.

90. Breslau 9.

91. Cambridge, Fitzwilliam Museum, 125.

92. Old Corinth. Figs. 1 and 2 of this article.

93. British Museum B527.

94. Museum of Palermo. Said to come from Gela.

95. Museum of Palermo.

96. Paris, Cabinet des Médailles, 301.

97. Syracuse 10786. Said to come from Megara Hyblaea.

98. Trieste 446.

99. Vienna, Kunsthistorisches Museum, Sacken & Kenner, p. 165, no. 102. Tischbein, V, pl. 28. Stephani, 20, Overbeck, 48.

100. Vienna, Kunsthistorisches Museum, Sacken & Kenner, p. 201, no. 120. Tischbein, V, pl. 27. Stephani, 21, Overbeck, 19.

101. Würzburg 381. Stephani, 42, Overbeck, 33.

102. *Lambros-Dattari Sale Cat.*, 38 (pl. VII).

103. Lost. Stackelberg, *Gräber der Hellenen*, pl. 15, 5. Stephani, 58, Overbeck, 26.

Red-figured.

Amphoræ:

104. Berlin 2159, signed by Andokides as potter. Hoppin, *R.F.*, I, pp. 32-33, no. 1 *. Stephani, 60, Overbeck, 1 (62).

105. British Museum E255. Attributed by Hoppin (*Euthymides and his Fellow*, pp. 48-9, pl. VIII) to Euthymides, and called "Style of Euthymides" by Beazley (*I.c.*, p. 65, no. 1). Stephani, 70, Overbeck, 13 (74). *C.V.A.*, British Museum, fasc. 3, pl. 3, a and b.

Celebae:

106. British Museum E491. Stephani, 66, Overbeck 16 (77).

107. Formerly in Millingen's possession. Gargiulo, *Raccolta de'monumenti*, IV, pl. 58. Stephani, 72, Overbeck 20 (81).

Kylikes:

108. British Museum D1. Attributed by Beazley to Duris (*I.c.*, p. 200, no. 10).

109. Rome, Vatican. Helbig, *Führer*, 1912 ed., I, p. 341, no. 570 (201). Stephani, 74, Overbeck, 5 (66).

Stamnos:

110. Paris, Louvre G180. *C.V.A.*, *Louvre*, fasc. 2, pls. 12, 9 and 13, 3, 6, 9.
Attributed by Beazley to the Siren painter (*i.e.*, p. 117, no. 2). Stephani, 69, Overbeck, 14 (75).

Cotyle:

111. Berlin 2318. Stephani, 65, 68. Overbeck, 9 (70).

Oenochoe:

112. Leyden. Roulez, *Choix de Vases Peints du Musée de Leyde*, pl. 8, 1.
Stephani, 64. Overbeck, 12 (73).

Group II, D. Herakles, Apollo, two onlookers.

- a. Two female figures without attributes. These may possibly be intended for Athena and Artemis, but there is nothing to show it. All black-figured lekythoi of poor style.

113. Athens, "Cultusministerium," Heydemann, *Gr. Vasenb.*, pl. V, 6.

114. Museum of Palermo. Said to come from Gela.

115. Vienna, Oesterreichisches Museum, 252.

116. Formerly in Revil coll., now lost. *Mon. dell' Inst.*, I, pl. 9, 3. Stephani, 32, Overbeck, 27.

117. *Delessert Sale Cat.*, 6.

- b. Miscellaneous figures.

Black-figured.

118. Amphora, formerly in Depoletti coll., now lost. Artemis and Hermes. Stephani, 51, Overbeck, 53.

Red-figured.

119. Kylix, in Rome, Villa Giulia. Signed by Pamphaios as potter. *C.V.A.*, Villa Giulia, fasc. 2, pls. 24, 25, 26. Hoppin, *R.F.*, II, pp. 304-05, no. 19 * bis. Attributed by Beazley to the Nikosthenes painter (*i.e.*, p. 44, no. 7). Athena and Iolaos.

Group II, E. Herakles, Apollo, Artemis, Athena, Hermes.

All black-figured.

Hydriae:

120. Berlin 1907. Stephani, 6, Overbeck, 28.

121. Formerly in Basseggio's possession. Overbeck, *Kunstmythologie*, Atlas, pl. XXIII, 11. (In Paris when Overbeck published it.) Stephani, 45, Overbeck, 29.

122. *Magnoncour Sale Cat.*, 44. Stephani, 35, Overbeck, 54.

Lekythos:

123. Syracuse. *Mon. Ant.*, XVII, pl. XXIII, 2, and p. 405. Leto is also present.

Oenochoe:

124. Munich, Jahn 1251. Stephani, 19, Overbeck, 30.

Group II, F. Same as last, with the addition of Zeus.

All black-figured hydriae.

125. British Museum B316. Stephani, 34, Overbeck, 42.

126. Formerly in Depoletti coll., now lost. *A.V.*, 125. Stephani, 50, Overbeck, 35.

Group II, G. Herakles with tripod. Apollo does not appear.

Black-figured.

127. Fragment of circular plaque in Museum of Eleusis.

Red-figured.

128. Celebe in Florence, 3981. Overbeck, 19 (80). Attributed by Beazley

to Myson (*i.c.*, pp. 48-52, no. 7).

129. Lekythos, in the Glyptothek, Munich. Attributed by Beazley to the Kleophrades painter (*i.c.*, p. 75, no. 55).

Calene Phialae, inscribed GABINIO or GABINII.

130. British Museum G135.

131. Paris, Cabinet des Médailles 1138.

Group II, H. Vases impossible to classify owing to faulty description. These vases are all lost and known only from Stephani or Welcker. They are for the most part included in Overbeck's list, and it seems safer to add them, though I fear they may be hopelessly lost.

Black-figured.

Amphorae:

132. Once in Gerhard's possession. Stephani, 7, Overbeck, 60.

133. Formerly in the Rogers coll., London. Stephani, 22, Overbeck, 36.

134. Formerly in Canino coll. Stephani, 40, Overbeck, 56.

Oenochoe:

135. *Notice de vases, etc.* (1843), no. 88. Stephani, 37.

Red-figured.

136. Form not given, formerly in Depoletti's possession. Stephani, 75, Overbeck, 22 (83).

Before taking up the few remaining vases that deal with this episode we must dispose of a claim sometimes made in behalf of a very beautiful vase-painting. This is the red-figured psykter in Munich, No. 745 in Jahn's catalogue (new No. 2417) best published in Furtwängler-Reichhold, pl. 16. This is attributed by Beazley to the Pan painter, and in my opinion is one of the best of his works. (*Att. Vasenm.*, p. 103, No. 39). One of the figures is believed by Panofka, Gerhard, Welcker, and Thiersch to be Herakles, and Gerhard considers it to refer to the struggle for the tripod; but the proper interpretation is that of Jahn, with whom Brunn, Braun, Müller and Furtwängler agree, that it is Idas and Apollo fighting for Marpessa in the presence of Artemis, Hermes, Zeus, Leto, and the father of Marpessa who is trying to stop the combat. Not only, therefore, has it nothing to do with the theft of the tripod, but nothing whatever to do with Herakles in any way.

We now come to two South Italian vases, one of which would surely show dramatic influence, while the second is also probably to be regarded as showing similar inspiration.

137. Volute Krater in Naples, 1762. This vase would apparently belong to the Paestum school, and has been known for a long time, having been published by Millingen in 1813.¹ The design shows Herakles, nude and bearded, running off to left with the tripod, pursued by Apollo, beardless, with a chlamys on his left shoulder and arm, but otherwise nude, his hair falling down along his neck in long locks. In his left hand he holds a branch of laurel. Above this scene, two windows are represented: in one of them appears the head of a woman; while to the left of the windows hangs a fillet, suggesting a wall. The background composition suggests the wall of a stage building, and consequently dramatic influence may be assumed. This vase is listed by Stephani, 76, and Overbeck, 21 (82).

138. Bell Krater in the Museum of Trieste, formerly in the Fontana collection. This vase is a parody of the subject, and may be based on a satyr play. Herakles' place is taken by a satyr, who has seized the tripod, and holds it with both hands over his head. He is pursued by Apollo who has a chlamys on his left arm, but is otherwise nude. He carries the club of Herakles in his right hand, with which he menaces the satyr; in his left hand is a bow. This curious vase was recognized by Curtius,² who first published it as derived from a satyr play; and he also enters into what in my opinion is a rather far-fetched "interpretation" of the myth, explaining it as a popular survival of a conflict at Delphi between the Semitic and Greek religions, Herakles being regarded as Semitic.³ For my part, I see in this vase only a caricature: the satyr is a comic Herakles.

A small group of vases is regarded as showing Herakles bringing back the tripod to Apollo. These should be held as a distinct class from those already listed, and are accordingly given new numbers. They fall into two divisions: in the first Herakles walks quietly with the tripod upright on his shoulders, his head being underneath the cauldron at the top, while around him are various onlookers; in the second he is accompanied by a god in a chariot.

Vases showing the Return of the Tripod.

A. Walking type.

1. Black-figured amphora in Munich, Jahn 1294. A.Z., 1867, pl. 227. Athena and three male figures, one of whom may be Apollo, are present.
2. Black-figured amphora in Boulogne. One other male figure.

¹ *Peintures antiques de vases grecs*, pls. 29, 30 (republished by S. Reinach, 1891).

² *Herakles der Satyr und Dreifussräuber*, 12 Berl. Winckelmannspr., 1852; see also *Philologus*, 1868, pl. IV, 1.

³ See A.Z., 1867, pp. 105-110, *Ges. Abhandlungen*, II, pp. 215-234. This last is a reprint of the article in the *Berl. Winckelmannspr.*

Of doubtful application.

Black-figured amphora:

3. Formerly in Bourguignon coll., Naples (*Sale Cat.*, 1901, no. 17). *Ann. dell' Inst.*, 1882, pl. H. Single man (sometimes called Herakles) carrying a tripod on his head. This is more probably a victorious athlete.¹

B. Chariot type.

4. Black-figured amphora in the Louvre, no. F221. *C.V.A.*, Louvre, fasc. 4, pl. 41, 3. Athena in chariot, Herakles with tripod walking beside her.
5. Black-figured lekythos, now lost, published in Stackelberg, *Gräber der Hellenen*, pl. 15, 7. Athena has the tripod in the chariot with her; Herakles walks alongside.
6. *Lambros-Dattari Sale Cat.*, 37, pl. VII. Dionysos drives the chariot; Herakles walks beside the horses, holding the tripod. In front of the horses a draped figure.

In addition to these vases there is a relief on a Roman sarcophagus in Cologne² where Apollo is represented seated, and Herakles, holding the tripod, stands beside him, which should also be placed here.

We have already seen that one of the sides of the Dresden base has been interpreted as showing the reconsecration of the restored tripod, and in Fig. 3 of this article we have the publication of the replica of this side in Philadelphia. In a note (p. 321, note 1) I have mentioned the existence of another replica in the Hermitage. There is one vase which is sometimes regarded as showing this same subject, and that is the reverse of the amphora in Munich, Jahn 1294, listed above, where a group of figures stand devoutly in front of a tripod. Pottier³ regards this as Apollo putting the tripod back into place after its restoration, and with this interpretation I am in thorough agreement.

Finally we have one very interesting vase which appears to show the reconciliation of Apollo and Herakles after the return of the tripod. This is an Attic bell krater of the late red-figured technique, made approximately in 400 B.C. Formerly in the Coghill collection, it was known only from the plate in the album of Millingen;⁴ but in 1924 it found its way into the British Museum and was almost immediately republished.⁵ In the accompanying article, Forsdyke says that it is "the only representation of this happy ending," and this claim holds good.

The tripod stands on a pillar in the centre of the composition. Under, and slightly to the right of it, sits Apollo looking left, clad in

¹ For other lost vases, etc., which have been assigned to this part of the story, see Overbeck, *l.c.*, pp. 414-15, no. 2.

² Welcker, *Alte Denkmäler*, II, pl. XV, 27; Overbeck, *l.c.*, *Atlas*, pl. XXIV, 13.

³ Quoted by Reinach, *Répertoire des Vases Peints*, I, p. 403.

⁴ Millingen, *Vases de Coghill*, pl. XI-Reinach, *Répertoire*, II, p. 4, 4.

⁵ In *Illustrated London News*, vol. 165, 1924, p. 1152. (Forsdyke.)

a himation. He grasps the hand of Herakles, who moves toward him from the left. The hero, who is represented as youthful, has a chlamys thrown shawl-fashion over his shoulders but is otherwise nude, and carries his club in his left hand. Behind him is Hermes and a draped female figure with a sceptre, called by Reinach Hera: with this I am inclined to disagree, as Hera and Herakles were invariably so hostile that it seems unlikely that she would be put in as one of his supporting figures; so that in spite of the lack of aegis, helmet, or any other attribute, I would prefer to regard her as Athena. Behind Apollo two female figures, correctly named by Reinach Leto and Artemis, seem to shrink away from the scene, in horror: a very shrewd touch on the part of the painter, as showing that women cherish bitter feelings longer than men, and regard a former enemy with disfavor, even though the actual combatants have made up their quarrel and become friends again.

This brings up one point that has been used by Furtwängler and others, in discussing this exploit; they argue that the fact that Herakles is often represented as nude proves him to be a local god dispossessed by Apollo. I stated above that a less far-fetched explanation for this can be given. This is the intense preoccupation of the vase-painters with the delineation of the human body, and their attempts, often most successful, of showing it in violent and aggressive action. This theory is confirmed by an examination and analysis of other exploits of Herakles on vases. Several years ago I undertook to list those vases which deal with the capture of the Erymanthian Boar,¹ and I should like to point out that in no vase illustrated in that article does Herakles wear the lion's skin, and that in all but one he is nude, as he struggles with the boar or hurls him into the pithos. In listing those vases, my recollection is that he is nude quite as often as he wears the lion's skin, and that the same is true of the vases showing the Theft of the Tripod. I suspect that an analysis of any given exploit of Herakles, as shown on the vases, would tend to yield a similar result. We therefore can attach no great importance to the presence or absence of drapery or the lion's skin in the portrayal of this subject.

This ends the examination of the Theft of the Tripod as represented on the vases. We have shown its intense popularity with the vase-painters, and have intimated by more or less incomplete lists of other works of art that it was a favorite subject in mythological representation; but we have also seen that, as in the case of many other subjects, our actual literary evidence is late, and must be regarded as of less actual value than that afforded by works of art.

¹ In *A.J.A.* XXVIII, 1924, pp. 296-325.

We can only wish that some of the songs of the poets, to which Pausanias refers, could have been preserved to us.¹

STEPHEN BLEECKER LUCE

BOSTON, MASS.

¹ It has sometimes been suggested that the marble group of Apollo, Artemis, Herakles and Athena, by Dipoinos and Skyllis (see Pliny, *H.N.* XXXVI, 9) set up by the Sikyonians, represented this subject, but I agree with Stuart Jones (*Ancient Writers on Greek Sculpture*, p. 10) that these figures were separate temple statues. There would undoubtedly be some mention of the tripod if it had been represented.

I wish to acknowledge indebtedness to the American School at Athens for permission to publish the Corinth lekythos, and to Miss McHugh of the University Museum in Philadelphia for the photograph of the Neo-Attic relief here reproduced, and permission to publish it. To Professors Chase and Fowler, I wish to express thanks for reading this article in advance of publication.

American School
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ATTIC RED-FIGURED VASES AND FRAGMENTS AT
CORINTH

IN the spring of 1929 I began work in preparation for publication of the pottery found in the course of the excavations at Corinth by the American School at Athens from the beginning of the undertaking up to and including the year 1926, but not including the finds made by Professor Shear in his independent excavations. The results of the work will, it is hoped, add materially to the knowledge of the rather complicated problems connected with Corinthian ware, especially when compared with the recent systematic and thorough campaigns of Professor Shear, and the truly remarkable results obtained in 1929 by Miss Agnes Newhall, Fellow of the School. It is not, however, my purpose to speak of these wares, but rather of a few of the Attic finds.¹

The comparative absence of Attic pottery among the Corinthian finds is in itself quite remarkable, and points to a lack of commercial intercourse between the two city states during the fifth century, when, as is known, political relations were somewhat strained. That the Attic wares, however, had asserted their superiority, is shown by a group of vases to be discussed at the end of this paper. "Imitation," as we all know, "is the sincerest form of flattery"; and so we find a group consciously made in imitation of Athenian models.

I have selected for discussion a few of the outstanding pieces of Attic red-figured ware, but I must warn the reader that there is very little of it to select from, and that when he has seen these few examples, he has seen nearly all.

1. (Fig. 1a, b.) The first fragment selected for illustration is a piece of a lekythos, found by Hastings, June 21, 1904, in the Lechaeum Road area. For a time it was in the National Museum at Athens, but was returned to Corinth about 1914, and is now on view in the Museum at Old Corinth.

The shoulder has a beautiful palmette and bud ornament, most skilfully and boldly executed. On the body, at the junction with the shoulder, is a meander and saltire-square pattern.

The main design shows the head and upper body of Athena, her head turned to the left. In her right hand (lost; only the upper arm remains) she holds her helmet, part of the crest of which is preserved, while in her left hand (also lost) she holds her spear, the upper part of

¹ The photographs and drawings which illustrate this paper are the work of Miss Mary Wyckoff, artist-photographer on the staff of the School.

which, with the point, appears on the sherd, and rests against her left shoulder. She wears the aegis over a chiton with short sleeves and very fine folds. On her head is a diadem reaching from ear to ear, and tied at the back of her head by a purple ribbon, in a bow knot,



A



B



C

FIGURE 1. A. B. FRAGMENT OF LEKYTHOS BY THE BERLIN PAINTER.
C. FRAGMENT FROM SMALL VASE IN THE STYLE OF THE BRYGOS PAINTER

the ends of which fly out behind. This diadem is tipped all around by points, curving inward. In her ear is a circular earring. Her hair comes down in front on the forehead below the diadem, and lies in a mass of curls and ringlets along the nape of the neck, touching the top of the aegis.

Fragmentary as it is, this sherd can be absolutely attributed to its painter, without any doubt. It is by the Master of the Berlin Am-

phora,¹ and there are two pieces unanimously assigned to his hand, that offer excellent parallels.

The first is a shard at Bryn Mawr, first published by Beazley² and more carefully by Miss Swindler,³ said to have come from Rome. Miss Swindler in publishing it assigns it to this hand, and this attribution has always been accepted. The subject is the same, except that Athena wears her helmet.

The second is a figure of Athena on a stamnos in Munich, which also has always been given to the Berlin Painter.⁴ Among the many



FIGURE 2. FRAGMENTS FROM CALYX KRATER BY THE TYSZKIEWICZ PAINTER (?)

publications of it, the best for comparison with the Corinth fragment is in an article by Miss Miriam A. Banks.⁵ This article appeared in 1926, and came into my hands shortly after I had visited Corinth in that year to look over the pottery, and I was so struck with the resemblance between the two figures that I could hardly believe my eyes. Except that the Munich Athena wears no diadem, and that the helmet and spear are in opposite hands, the face and pose are practically the same, and one may be said to be virtually a replica of the other. The question then arises—should we restore the Corinth fragment to agree with the stamnos in Munich? In

¹ Beazley, *Att. Vasenm.*, 76–88.

² *J.H.S.* XXXI, 1911, pl. X, erroneously assigned to the Museum of Fine Arts in Boston.

³ *A.J.A.* XX, 1916, p. 344, no. XV, fig. 15. I owe my knowledge of this shard to Miss Newhall and Miss Wyckoff of the American School, both graduates of Bryn Mawr, who noticed the close resemblance it bears to the Corinth fragment.

⁴ Jahn 421, present no. 2406. Publ. Gerhard, *A.V.* 201; *F.R.* pl. 106, 2.

⁵ *A.J.A.* XXX, 1926, pp. 58–69, pl. III, fig. 14.

that vase the goddess is moving violently to the right, looking backward. I personally believe that in the Corinth fragment Athena is at rest; her face is calm and serene. Nevertheless, the Munich vase affords such a close parallel that the attribution to the Berlin painter is unquestionable.

2. (Fig. 2.) The next specimen is a large fragment from a calyx krater. Unfortunately there are no indications available as to when or where in Corinth it was found. It is at present in the storehouse of the Museum. When complete it must have been a huge vase of at least 40 cm. in height, with a diameter of about the same dimension.

The top of the vase is a simple convex mould, below which is a flat frieze projecting about 3 mm. on an upward slant from the lower body. This frieze is decorated with alternate palmettes and buds, connected by graceful tendrils.

Of the design below, only one figure remains. This is a warrior, facing right, bent low, evidently on the point of death. On his left arm is a round shield, the inside of which faces the spectator. Beside the crossbar through which the arm goes, there are cords (rendered in brown lines) and tassels around the inside, and the grip for the hand also ends in tassels. The hand, of which only three fingers are preserved, has let go the grip as the warrior sinks in death.

On his head he wears a Corinthian helmet, pushed up on the head, showing the face; this helmet originally had a high crest, part of which remains. The eye-holes and nasal are indicated, and there is a border of dots where the crest is attached. On his body, of which only shoulders and chest are left, he wears a cuirass with broad shoulder straps, and chest piece, over a short sleeveless chiton with fine folds. Two brown lines that go across the body from over the right shoulder doubtless indicate the baldric for the sword.

The warrior himself has a long beard and short mustache, the beard being of solid black, with fine black lines at the outer edge to suggest the hairs. The hair appears from under the helmet, and is massed in long ringlets along the nape of the neck, with two long cork-screw curls falling on the chest. The eye is rendered in full face. Details of muscles on the arm are rendered with faint brown lines.

It is a great pity that we have no more of this vase, for when complete it must have been magnificent, and even now it is one of the finest fragments to be found in Greece. Moreover, an attribution is possible, and though not so certain as in the case of the lekythos, it is worth proposing. The best comparison which I can suggest is with the figures in the Tyszkiewicz krater in the Museum of Fine Arts in

Boston, and therefore I am tentatively assigning it to the Tyszkiewicz Painter.¹

3. (Fig. 1, c.) A small fragment, perhaps from a kylix, now in the storehouse of the Museum. As in the case of the preceding vase there is no indication as to when or where it was found. A bald-headed, nude, bearded silen is moving toward the left. Only the head and upper part of the body remain. Behind him is a palmette. This little fragment reminds one of the Brygos Painter, and may be a school-piece.

4, 5, 6. (Fig. 3.) Of the vases here illustrated, I shall discuss only the three central lekythoi, as two of these can safely be attributed.



FIGURE 3. LEKYTHOI FOUND AT CORINTH

They were all three found by Hill and Dinsmoor, in tombs opened by them in 1916, and are at present in the storehouse of the Museum.

4. The central lekythos is from their Tomb 39, associated with late black-figured and Corinthian ware, and therefore suggesting a date early in the fifth century. The handle is missing, otherwise it is intact. H., 12.7 cm.

The design is in outline on a white ground, and consists of a youth facing left, draped in a himation, and leaning on a long staff. It is undoubtedly by the Painter of the Bowdoin Pyxis, a "pot boiler" of this period, who produced cheap vases in both the red-figured and white-ground techniques. Vases similar to ours in red figures are to be found in Bologna and the Louvre.²

5. This next lekythos is also by the Painter of the Bowdoin Pyxis, and was found in Tomb 44 of the Hill-Dinsmoor campaign of 1916. Associated with it was the other R.F. lekythos to be discussed, and

¹ Beazley, *Att. Vasenm.*, 113-116.

² The Bologna Vase is *Necr. Fels.* 358 that in the Louvre, G577. They are listed in Hoppin, *R.F.* I, p. 95, no. 15, and p. 98, no. 43.

a number of late black-figured and Corinthian vases. Therefore a date of approximately the same period with No. 4 can safely be given. This little vase is intact, and in excellent condition, only the neck being broken and very skilfully mended. H., 10.8 cm.

The design shows a woman standing in profile to right, a phiale in



FIGURE 4. LATE RED-FIGURED KYLIX: OLD CORINTH

her outstretched hand. At the left, behind her, is a chair, above which hangs a mirror. In front of her is an object which resembles a basket for wool, but which may, on account of the phiale, be intended for an altar, on which she is about to pour a libation. This is a common subject with this painter and, for comparison, I might select two lekythoi in the National Museum in Athens.¹

6. Found in the same tomb with No. 5. It has been broken and mended, but only the handle is lost. H., 11.2 cm. The design is a bud between two palmettes, enclosed with tendrils. It is not unlikely that this, too, is by the Painter of the Bowdoin Box.

¹ C.-C. 1391 and 1417. Hoppin, *l.c.*, p. 94, no. 4, and p. 95, no. 10.

7. (Fig. 4.) The last Attic red-figured vase to be discussed is a small, flat kylix, 15.2 cm. in diameter. The handles have been restored in plaster. There are no indications as to when or where it was found. It is on view in the Museum. In execution it recalls, of all the isolated painters, Beazley's Pothos master, who flourished at the very end of the fifth century.¹ If not by his hand, it is contemporary with him; if by him, it bears a certain importance as being the first vase not a krater to be assigned to him.

Inside a border of meanders and heavy saltire-squares sits Dionysos, facing left, bearded, wearing a garland of ivy around his head, and holding a thyrsos erect in his right hand. The upper part of his body is nude, and his left hand rests on the back of his chair. Around the lower part of the body, and wrapped about the legs, is a himation, rendered in fine, graceful folds.

In front of him is a very curious figure, moving towards him with arms outstretched,—a figure not often found on vases. At first glance we should call it a silen, from the tail at the back, and the fact that the lower part of the body is distinctly masculine; but the head and hair is that of a woman, and so are the breasts. We must call it a hermaphrodite faun.² This peculiar creature is nude, except for a tight-fitting garment, apparently of the skin of an animal, which starts just below the tail, and extends about halfway to the knees, recalling a modern pair of bathing trunks. Through this garment protrudes the male organ.

8-17. (Fig. 5.) Finally before leaving the fifth century, let us take up some of the white-ground funeral lekythoi found at various times in Corinth before Professor Shear's systematic tomb excavations. The vases here illustrated are all in the storehouse of the Museum. Of those selected for illustration, all but one, No. 13, come from the Hill-Dinsmoor campaign of 1916. Nos. 10 and 12 were found in the same tomb, and there is a strong presumption that Nos. 8 and 17 were found together; their inventory numbers are consecutive, but the labels originally placed upon them are lost. Nos. 15 and 16 are also from the same tomb. None of them has its decoration preserved, and the white slip was in every case of the chalky type. The associated objects, where known, point to a date in the end of the fifth century, except in the case of No. 9 (second from left, bottom row) which may be slightly earlier, but not much.

¹ *Att. Vasenm.*, 453-454.

² I know of no other figure like it on vases; and hermaphrodites in general are very rare, and for the most part confined to late vases. Three are included in Reinach's *Répertoire*; a calyx krater in Würzburg (*Mon. dell' Inst.*, X, pl. 3); a bell krater once in the Barone Coll., Naples, now lost (*Bull. Nap.*, V, pl. 4); and a lost Tischbein vase (III, 21). Of these the last two have the upper parts of a woman and the lower parts of a man, the first *vice versa*.

The photograph shows very well their present condition, and the uneven quality of their execution, some being excellently made, while others are very poor. No. 16 is unquestionably the best, both in preservation and in workmanship, as it is in size; while Nos. 11 and 14 are both good.

The important feature of these vases, however, lies in the fact that in every case we can surely state that they are of Corinthian manu-



FIGURE 5. WHITE LEKYTHOI: OLD CORINTH

facture. The clay is the greenish-buff type always associated with Corinthian wares; the black "glaze," where it appears, is really not a glaze at all, but a thin wash, which has a tendency, as the photograph shows, to disintegrate and break down under the action of the earth and moisture in the tombs. No Athenian potter, however humble, would let a "glaze" like this go out of his shop; and the fact that it is frequently found at Corinth, not merely on these vases, but on others as well, shows that there was a distinct effort being made in the last quarter of the fifth century, to imitate Attic wares, and, by underselling them, to keep this particular and highly lucrative branch of the ceramic industry in local hands; for no true Attic

white funeral lekythoi have, to the best of my knowledge, been found at Corinth.

If this is so, it would point to the introduction of the chalky white slip on Athenian lekythoi at a date around the third quarter of the fifth century; for it stands to reason that the Corinthian potters, in imitating it, had to start after it had been introduced in Athens. That their slip, as well as the glaze, was of inferior quality, is evidenced by the fact that none of the decoration of these vases has been preserved; and thus we may say that the whole thing is a cheap and rather nasty imitation of Attic ware, turned out in large quanti-



FIGURE 6. FRAGMENT OF CAMPANIAN KRATER: OLD CORINTH

ties for commercial purposes, and undoubtedly sold at such low rates as to drive the far superior Attic product out of the market.

18. (Fig. 6.) Finally comes a small puzzle, a piece of a bell krater, with no indication as to when or where found, now in the storehouse of the Museum. It is certainly of South Italian manufacture, of the fourth century—and what is it doing in Corinth? The lip is flanged, and along the edge runs the zigzag pattern shown above. On the flare of the lip, joining it with the body, runs a pattern of large laurel leaves, facing left.

All that is left of the design is the head and shoulders and a spiral, perhaps the end of the tail, of a comic silen, profile to right. Above him the black glaze forms an arch, and in the spandrels are conventional foliage patterns in black on the color of the clay. The slip is not the warm terracotta red of the Attic ware, but of a pale pinkish color, and the black glaze is lifeless as compared to the Attic, and more thinly applied.

The subject is of a comic character, and the whole scene was

doubtless from one of the "Phlyakes." The tousled short hair, the round staring eye, the flat, snub nose, and the enormous mouth suggest a mask.

Two South Italian centres specialized in vases of this kind; the Paestum School, and Saticula, the modern Sant'Agata dei Goti. My own feeling is that this fragment is from Saticula rather than from Paestum, and hence is Campanian. It therefore assumes a certain importance in testifying to the importation into Corinth of South Italian fabrics in the fourth century, and consequently to the probable decline of the ceramic industry at that time in what had been one of the principal centres in Greece.

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AN ARCHAIC GODDESS AND CHILD FROM LOKROI

A SMALL terra-cotta statuette of a goddess and child from Lokroi in South Italy (Fig. 1a-b), now in the Museum of Classical Archaeology and Art of the University of Illinois, affords an excellent example from the early fifth century of a motive which, though occurring in the archaic period,¹ was first to be established in art by Cephisodotus at the beginning of the fourth century, and continued by Praxiteles, Xenophon,² and others.

The statuette from Lokroi measures .252 m. from the feet to the top of the diadem (.273 m. including the base). The figure is completely preserved with the exception of the right hand, which was broken off just below the wrist with the consequent regrettable loss of the attribute. The bare feet rest on the original square base.

The goddess stands erect with the right foot turned markedly outward, though not advanced. The feet and hands are large, as in the Hera of Samos, and the fingers and toes are correspondingly long and heavy, although there is evidence of a delicately tooled outline of the nails. The head is turned toward the child, whose whole weight rests on the left hand of the goddess. He looks up and stretches out his arm, apparently attracted by some object held in her right hand. The lips of the goddess and of the child are drawn up in the "archaic smile." The anatomy of the child suffers from the inability of the artists of the archaic period to give realistic proportions to the forms of children.

A simple chiton falls from the shoulders of the goddess in long, even, and symmetrical folds, which are scarcely interrupted where the puckered indication of the girdle marks a fairly high waistline. The same effect is produced in the rear, although there the lines are much more cursorily drawn. A folded himation, or diplax, hangs over her right shoulder, continues across the back, and is caught again on the left arm, where it is allowed to fall free from the body on that side. The most careful attention to drapery moulding has

¹ Cf., for instance, the inscribed fragment of a sixth-century Black-Figured votive plaque from the Acropolis at Athens, on which Aphrodite is represented holding two children, Himeros and Eros, one on either arm (Seltman, *B.S.A.*, XXVI, 90, Fig. 1). See also Gerhard, *Auserlesene griechische Vasenbilder*, I, pls. LV and LVI, for further illustrations of the motive in Black-Figured vase technique.

² The group of Tyche and the child Ploutos set up at Thebes is probably to be attributed to Xenophon. See Paus. IX, 16, 2; Gardner, *A Handbook of Greek Sculpture*, 387.

been devoted to the short sleeves of the chiton as they cling to the upper arms.

The goddess wears a diadem, and a double incision around the child's hair is doubtless intended to represent a fillet.

Evidence of color is clearly preserved. The conventional red of the hair of goddess and child is still plainly visible, and flecks of gilt are yet to be traced on the diadem. The face and feet of the goddess and the nude body of the child retain some of the white pigment of the flesh. The chiton may be restored as blue; the himation was probably red as also was the base on which the goddess stands.

The technical defects of an archaic age have not destroyed in any sense the charm of the production. It has all the vitality of a progressing art. Though the animation of the faces be due to the "archaic smile," there is not a line in the group which fails to contribute to the dignity, reserve, and power which we expect in the best work of Greece during the period just before perfection of form has been attained, and likewise before any suggestion of decline has been foreshadowed.

In the field of plastic art two or three fruitful comparisons suggest themselves in connection with the Lokroi figurine. Firstly, from the earliest times small terra cottas were moulded to represent an adult holding a child. A glance through Winter's *Die Typen der figurlichen Ter-*



FIGURE 1A. SEMI-PROFILE VIEW OF
LOKROI FIGURINE

*rakotten*¹ will serve to illustrate the frequency of the type and the course of its development. The same technique, following the same chronological development, may be observed also in the representation of a human figure holding an animal or some inanimate object.²



FIGURE 1B. FULL-FRONT VIEW OF LOKROI FIGURINE

terracotta goddess belongs, marked similarities of pose and form show that the Lokroi group is in the line of the true tradition. In each case an adult holds a child in the left arm, and an element of momentary interest is created in the exchanging glances of adult and child. The sentimental interest is most clearly marked in the Cephisodotus group, where the fleeting expression on the face of Eirene is intentionally attributable to the presence and actions of the child. It has been called forth in an instant and it may vanish as quickly.

¹ Die Antiken Terrakotten, F. Winter, *Typen d. fig. Terrak.*, III¹, p. 11, No. 3, one of the earliest Cyproite fragments; p. 14, No. 3; p. 16, No. 5; p. 26, No. 7;

Secondly, larger terra cottas from Magna Graecia should also be examined,³ for the makers of statuettes imitated in the main the larger cult statues, introducing such alterations as the smaller adaptation demanded.⁴ The scarcity of marble or even good workable stone in Sicily and South Italy was responsible for the development of modelling in the field of terra cottas in western Greek lands, and the genius of native art is to be found in clay rather than in such marble or stone images as were fashioned.⁵

Thirdly, the points of resemblance and difference between the Lokroi figurine and the principal fourth century adaptations of the motive, namely the Eirene and Ploutos of Cephisodotus and Praxiteles' group of Hermes with the infant Dionysus, are instructive (Fig. 2a-b-c).⁶ While the type may be traced to a much earlier date than that to which the terra-



FIGURE 2A. LOKROI FIGURINE SHOWING THE CHILD CLASPED TO THE BODY



FIGURE 2B. EIRENE AND PLOTOUS SHOWING THE CHILD RESTING ON THE FOREARM



FIGURE 2C. HERMES OF PRAXITELES SHOWING THE CHILD HELD FREE FROM THE BODY

The Hermes bears the characteristic Praxitelean expression of idle meditation. The god has been conceived in a spirit of abstraction with eyes cast far beyond the child, whose interest is centred in whatever object Hermes may be holding in his upraised hand.

In the Lokroi figurine sentimentality is entirely lacking, as one would expect at a time when individualism and symbolism have not yet made themselves felt in art. The expression on the face of both goddess and child is due to the "archaic smile" of the transitional period and not to a conscious creation of momentary sentiment by the artist. Nevertheless, the motive is identical, and the goddess undoubtedly held some object in her upraised right hand, much as did Eirene to attract the attention of Ploutos.

In the position of the adult and child the technique of detachment in the three figures is progressive. The artist of the Lokroi figurine has moulded his forms as a unit. With the exception of the tip of the diplax there is no free-standing element in the design. The form of the child follows the contour of the goddess' body in such a way that both of his legs and also his head are in profile, while the torso is almost in full front, and both arms are engaged, the right extended across the breast of the goddess, the left clinging to the child's own body. The anatomy of the child is characteristic of the period, an adult in miniature; arms and legs are too long, muscles too well developed, face and hair mature. It is clearly the least successful part of the group.¹

Cephisodotus has represented the child Ploutos resting on the forearm of Eirene. She holds a little vase in her free hand, the handle

and especially pp. 139–155, *Weibliche Figuren mit Kindern*; III², p. 6, Nos. 2, 3; p. 46, No. 3; p. 66, No. 4.

¹ *Ibid.*, III², p. 17, Nos. 1, 3, 6, 7; p. 33, Nos. 5, 6; *et passim*.

² E. Douglas Van Buren, "Archaic Terra Cotta Agalmata in Italy and Sicily," *J.H.S.*, XLI, 1921, 203 ff., especially p. 206.

³ There were large, though apparently separate, statues of Demeter (Ceres) and Triptolemus in front of the temple of Ceres at Henna, which Verreaux wished to carry off (Cic., *In Verrem Act.*, II, Book IV, xlix, 110). Similar statues would assuredly be found in archaic times.

⁴ An exception is to be noted in the archaic marble statue now in the Berlin Museum. It is of the same provenance, and shows the characteristics of the late archaic period, which can be traced so clearly in the little terra-cotta group. See *Arch. Anz.*, XXXII, 1917, 118 ff., with numerous illustrations; also Van Buren, *op. cit.*, p. 203, for some observations on the greater use of terra cotta in South Italy.

⁵ Figures 2b and 2c have been reproduced by permission from Brunn-Bruckmann, *Denkm. griech. und röm. Sculp.*, pls. 43 and 466 respectively.

⁶ Perfection in the modelling of infant anatomy was not attained until very much later. Praxiteles also found it a difficult task. Compare the points of similarity in the maturity of the face, the treatment of the hair, and the fillet about the head in the child of the Lokroi figurine and the Dionysus of Praxiteles. The Ploutos of Cephisodotus, so far as the copy may be accepted as a safe guide, shows the greatest skill in this particular.



FIGURE 3C. ATHENA FROM AN OLYMPIA METOPE



FIGURE 3B. ACROPOLIS MAIDEN



FIGURE 3A. ATHENA FROM THE TEMPLE OF
APHAIA

of which is grasped by the child, whose other hand is extended toward the face of Eirene.

Praxiteles has carried the same principle still further. The child rests on the forearm of Hermes, much as in the preceding group, but the arm and the falling drapery have been thrown so far clear of the body that it has been necessary to devise supports both to the ground and from the left thigh of Hermes to the tree-trunk. The left arm of the child reaches out to the dangling cluster of grapes, if such be the true attribute, the right one clings to the shoulder of the god.

The date of the Lokroi figurine may be determined with reasonable accuracy. That it belongs to the archaic period is immediately evident from the whole style, nor is there any question of archaizing as in the Artemis statue in the National Museum at Naples.¹ The mistakes in anatomy are too obviously due to the limitations of the artist, and there is at the same time too much genuine feeling for form and pose, to suggest that it is a studied reversion to an older type.

The "archaic smile" is pronounced, though it has been modified considerably from that of the Apollo of Tenea and other works of the sixth century. A closer parallel in facial expression is to be found in the Athena of the West Pediment of the temple of Aphaia on Aegina (Fig. 3a).² It would be unfair, however, to take the Athena as an entirely typical representation of the art of 480 B.C. The athletic school of Aegina was least successful in portraying a draped female form, and one's judgment should be corrected by studying the Acropolis Maiden at the same time (Fig. 3b).³ Nevertheless, both in the characterization of the countenance and in the symmetrical diamond pattern into which the side folds of the himation fall, there is something strikingly similar in the technique of the Aphaia Athena and the Lokroi goddess (Figs. 1a-b and 3a).

In respect to facial anatomy the Lokroi figure is distinctly more primitive than the Athena as she appears on the Olympia metope (Fig. 3c), which dates about 460 B.C. The Lokroi figurine then is evidently to be dated between the earliest archaic works and the Olympia metopes. To assign it to the transitional period of the Aegina pediments would seem to be the correct solution.

It remains to suggest an identification of the goddess and child. The group belongs to a period much too early to entertain the suggestion of a symbolic pair in the sense in which that motive was

¹ Bulle, *Der Schöne Mensch*, pl. 115.

² Figures 3a, 3b, and 3c have been reproduced by permission from Brunn-Bruckmann, *op. cit.*, pls. 23, 459, 442 respectively.

³ See Rodenwaldt, *Die Kunst der Antike*, pp. 208-09, and pl. VII.

developed after the fifth century. The diadem, moreover, proclaims the goddess, and the fact that the child is in the arms of a goddess indicates that it too must be divine, or at least associated with divinity.

The following goddess cults were well known at Lokroi:¹ Aphrodite, Athena, Demeter, and Persephone. There is also some scattered evidence for the worship of Artemis, Hera, and one or two others, which is scarcely sufficient to prove the existence of an established cult.

The principal goddess seems to have been Persephone, who usurped from Demeter the predominant position which she held at Lokris.² Persephone can, however, scarcely be the goddess here intended, for there would be no reason to associate the child with her. Athena may be dismissed for the same reason. A group of Aphrodite and Eros would not be an impossible conjecture, but there is no attribute to suggest either, and the goddess has a fullness and maturity, despite the straight lines of her garments, which is not in harmony with the accepted artistic tradition of the Goddess of Love even at so early a date.

There remains Demeter,³ with whom would be associated the boy Triptolemus. It is true that a parallel example of Demeter holding Triptolemus in her arms does not come readily to mind, but the rarity of the type is not altogether surprising. When the Greeks chose to portray the goddess and the youth in art, the incidents of their later relationship were found to lend themselves much more readily to artistic representation. Triptolemus is pictured with great frequency seated in his chariot drawn by winged dragons,⁴ and receiving from Demeter the seeds which he is to scatter over the surface of the earth. The two figures are also represented, as in the Eleusinian relief, with the boy standing and receiving the grains of corn from the goddess.⁵ These were the incidents in the story which were of deepest interest to the Greeks and which they most freely represented in art or described in literature.

But there was an earlier chapter to the story. Demeter, grieving

¹ Oldfather, Pauly-Wissowa, *Real-Encyclopädie*, s.v. Lokroi, cols. 1349 ff.; also *Philologus*, LXXI, 1912, 321 ff.

² Oldfather, *Philologus*, LXIX, 1910, 117.

³ One new type, related to the *cista mystica*, was found at Lokroi by Orsi. This represents a woman worshipping a child who stands upright in the *cista*. See Oldfather, *Philologus*, LXXI, 1912, 325-26, and note 10. In the present case there is no suggestion whatever of the *cista*, and a possible connection simply on the ground of adult and child need not be seriously considered.

⁴ Hoppin, *A Handbook of Attic Red-Figured Vases* (see index s.v. Triptolemus, Demeter, Persephone) gives some idea of the numerous representations of Triptolemus in his winged car, or in other associations with Demeter and Persephone, in vase-painting.

⁵ Farnell, *Cults of the Greek States*, III, 264-65.

at the loss of her daughter Persephone, wandered inconsolably over the face of the earth, until she was finally received in the house of Celeus and Metanira at Eleusis,¹ and entrusted with the care of the child Triptolemus. This is the scene depicted in the Lokroi figurine. Demeter, in her capacity as nurse, holds the child Triptolemus in her arms,² as she held him each evening before seeking to burn away his mortal weaknesses. If the attribute in the right hand were preserved it might conceivably prove to be a handful of wheat stalks.³

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¹ Pausanias (I, 14, 2-3) complains of the numerous and confusing variations in the legend of the parentage of Triptolemus. That indicated above is the most generally accepted one, and in any case the only point of immediate interest is the relationship of Triptolemus with Demeter. Even this account is by no means consistent. Many of the incidents in the relationship of Demeter and Triptolemus are told also of Demeter and Demophon. See articles in Daremberg et Saglio, and Roscher, *Lex. der griech. und röm. Myth.*, s.v. Triptolemus.

² There were assuredly many archaic statuettes intended to represent simply the goddess Kourotrophos in a general way. The absence of definite attributes in this case perhaps counsels some reserve in identification. See Farnell, *op. cit.*, III, 231. On the other hand, there is little evidence for the independent existence of the cult of Kourotrophos in Lokroi (Pauly-Wissowa, s.v. Lokroi, cols. 1349 ff.; *Philol.* LXXI, 1912, 321 ff.). Any such worship would inevitably follow the usual tendency to associate Kourotrophos with some important local deity, and we would find at least Demeter Kourotrophos. Cf. Ἑλλὰς Κουροτρόφος (Eurip. *Troad.*, 566); Γῆ Κουροτρόφος (Aristoph. *Thesmorph.*, 300; Paus. I, 22, 3). See also Hesychius, s.v. Κουροτρόφος; De Saussure, *Mélanges Nicols*, 509, note 1.

³ This would, of course, presume two stages of the myth represented in the same group, which is by no means unparalleled. Cf. the successive stages of the story of Glaucus and Polyeidos on the cylix of Sotades (*White Athenian Vases in the Br. Mus.*, pl. XVI).

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AN ILLUSTRATION OF HESIOD ON A BLACK-FIGURED
PLATE BY THE STRIFE PAINTER

THERE has recently come into my possession a remarkable Attic black-figured pinax¹ said to have been found in Attica (Fig. 1). The bottom is decorated with broad circular brownish-red bands. On the front side, of which the lower part and considerable of the outcurving rim are missing, the offset convex border is decorated with a white zigzag and pierced with two holes for suspension. Such Attic plates as a rule have floral ornament on the brim and carry as many figures and accessories as possible in the decorative field. Such plates of the sixth century B.C. are rarities of themselves,² many of them being Corinthian or Rhodian, or Naukratite, but it is the subject of the main scene which makes this vase especially attractive. On a light brown clay covered on the interior with a brownish yellowish slip two winged figures are painted in black glaze with additions of white and purple and with many incised lines. They are running or flying to right. The one in front covers most of the one in the rear, whose face, neck, and legs however are visible. The one in front wears a short sleeveless chiton with wavy parallel incised lines extending from the neck to the lower edge, which is decorated with an incised pot-hook or wave design, the whole covered with white. Over the white chiton is a skin or loin-cloth with a pointed section reaching up to between the breasts, and another narrow section extending down the right leg. The wings of the figure are decorated above the lower zigzag edge with parallel vertical incised lines below, and above are broad purple and white bands. The white band has vertical incisions, above which the wings with curving upper edge are ornamented with incised half circles. The hair is done up in a circular knot at the back and arranged in half-circles or spirals over the forehead. Both faces have the so-called archaic smile, with long noses, eyes formed of a double circle,

¹ Diameter 0.22 m., of central portion 0.145 m. Height 0.03 m. Width of offset edge 0.04 m.

² Cf. the pinax from Marathon in Berlin and two pinakes in Leyden pictured in *Ath. Mitt.* VII, 1882, pls. III, IV, and that in Toronto pictured in Robinson, *Catalogue of Greek Vases of the Royal Ontario Museum of Archaeology*, pl. XXVI, No. 283. The shape, decoration on the bottom of the Toronto pinax, the two holes for suspension, and the general style are so similar that perhaps the same artist painted my pinax and the Toronto specimen. Several typical Attic black-figured pinakes are illustrated in *Exploration Archéologique de Délos*, X, pls. LI, LII. Cf. also Roulez, *Choix de vases peints du Musée d'Antiquités de Leide*, pl. 17; *Mon. Ant.* XXII, 1913, p. 500; Graef, *Akropolivaseren*, pl. 98, 2424, pl. 99, 2428a, 2451, 2452, 2465; Baur, *Cat., Stoddard Collection*, pl. 5, 127. Those republished and attributed to the Menon Painter by Smith are sparsely decorated and very different (cf. *Univ. of California Publ. in Cl. Arch.* I, 1929, pp. 33-37).

FIGURE 4. THE BOTTOM OF THE PLATE



FIGURE 1. INTERIOR OF BLACK-FIGURED PLATE



and protruding round chin. The upper body is in front view, as are the eyes, though the lower body is in profile. The left hand is extended far to the front with the open palm projecting onto the convex rim to the plate. The right is held far back with the rear of the hand shown. The right knees are bent to the ground in the usual archaic running attitude.¹ The knees are well rendered and characteristic, and the artist lays great emphasis on the lifelike rendering of the muscles of legs and arms. The legs are stretched so far apart to give the idea of fast running that the front feet overlap the sunken edge



FIGURE 2. PLATE FROM DELOS



FIGURE 3. VASE FRAGMENTS FROM THE ACROPOLIS

onto the convex rim. Purple retouches in addition to white enliven the scene which is vividly portrayed with much life and dash. The style is so similar to that of the winged running Eris on the plate (Fig. 2) published in *Exploration Archéologique de Délos*, X, pl. LII, 637 and on the plate (Fig. 3) in Graef, *Akropolisvasen*, pl. 98, 2418a and b² where there is also a hare, that I believe the same artist

¹ Cf. Schmidt, "Der Knielauf und die Darstellung des Laufens und Fliegens in der älteren Griechischen Kunst" in *Münchener Archäologische Studien dem Andenken Adolf Furtwänglers gewidmet*, pp. 253 ff. Cf. especially the Cyrenaic cylix pictured on p. 286.

² Graef, *op. cit.* p. 236, wrongly calls the figure male. There may even have been white on the face as also on our vase. It may have worn off.

painted all three of these plates and also Graef, *Akropolisvasen*, pl. 98, 2424 which has two hares with snout and belly white as on our pinax. These plates have the same technique of slip and black glaze with purple and white and beautiful refined incised lines used in the same way. The style of hair, eyes, nose, mouth and face, the hands and feet, the garments, and especially the animation and use of delicate incised lines and the overlapping of white and purple in the scene are similar. The plates have the same dimensions and two holes for suspension and similar subjects. I venture to call our new artist the "Rabbit Master" or perhaps better the "Strife Painter" and to put his activity about 540-530 B.C. I believe a careful study might add many more attributions.

There can be no doubt that we have on our plate a representation of the two kinds of Eris or Strife which Hesiod differentiates at the beginning of his *Works and Days*, lines 11 ff.¹ The snake at the bottom of the picture is the symbol of the bad and blameworthy kind of strife, the hare so well-preserved on the vase is the attribute of the good and wholesome strife. To leave no doubt in the spectator's mind the artist has incised a graffito on the obverse and reverse. On the front the inscription is ΕΠΙΝ, "Eρω", in the accusative case as if the artist were saying: "This scene represents Eris." Part of the *nu* is missing. On the reverse the graffito (Fig. 4) is difficult to decipher. It seems to read ΕΣΕΠΑΩΝ. It is probable that the pinax was a votive offering, as the two suspension holes would indicate, in some shrine of the Strifes, though I know of none such in Greece, to say nothing of Attica. The fifth letter might be an iota and then we could read in Attic ἐσ Ἐπί(δ)ον or possibly a vulgar genitive 'Epiον, "for the shrine of the Strifes." Or we might read 'Eρων ἐσ Ἐπι<ο>ν, "Strife against Strife." But after careful examination of the pinax I believe that the fifth letter is gamma and that the proper reading of the two graffiti is 'Eρων ἐσ Ἑργον, the Strife that stirs even the helpless to labor, the kind of strife to which Homer refers in *Od. XVIII*, 366, ἔρις Ἑργον. Though I prefer the above reading, it is possible that the fourth letter on the front was delta, Δ, and that we should read 'Eριδες Ἑργον (Attic for Ἑργων). The artist who was fond of solemn and hieratic scenes, may actually have had in the mind lines 20 and 21 of Hesiod's *Works and Days* and especially the words ἐπὶ Ἑργον. Representations of Eris are rare in early Greek Art.² There is an interesting one on a black-figured vase pictured in Roscher's *Lexikon der griechischen und römischen Mythologie*, I, p. 1338,

¹ Cf. also Ps. Longinus, *On the Sublime*, II, 13; Galen, X, 6K and 7K; Theodor. Metoch., *Misc. phil. et hist.*, 631 M-K.

² Cf. Pauly-Wissowa, *Real-Encyclopädie*. s.v. *Eris*.

where the figure has similar wings to ours and is inscribed ΕΠΙΣ (C. I. G., 7419), and is in the attitude of the Archaic Winged Victory from Delos. We know from Pausanias, V, 19, 2 that on the Corinthian Chest of Cypselus Strife was represented as a most hideous hag between the fighting Hector and Ajax. In the sanctuary of Artemis at Ephesus, Calliphon of Samos represented Strife in a similar way in his picture of the battle at the Greek ships. There may be some Corinthian or Ionic influence on our pinax but Eris is not represented as hideous. In any case our pinax which dates about 540 B.C. and which is an interesting work of archaic Greek painting gives us the first known representation in art of the two kinds of Strife.

Οὐκ ἄρα μοῦνον ἔην 'Εριδων γένος, ἀλλ' ἐπὶ γαιῶν
 εἰσὶ δύο· τὴν μὲν κεν ἐπανέστει νοῆσας,
 ἡ δ' ἐπιμωμητή· διὰ δ' ἄνδιχα θυμὸν ἔχουσιν.
 ἡ μὲν γάρ πόλεμόν τε κακὸν καὶ δῆριν ὀφέλλει,
 σχετλίη· οὕτις τὴν γε φιλεῖ βροτός, ἀλλ' ὑπ' ἄνάγκης
 ἀθανάτων βαυλήσων 'Ερις τιμῶσι βαρεῖαν.
 τὴν δ' ἑτέρην προτέρην μὲν ἐγείνατο Νύξ ἐρεβενή,
 θῆκε δὲ μιν Κρονίδης ὑψίζυγος, αἰθέρι ναιων,
 γαῖης ἐν βίζησι, καὶ ἀνδράσι πολλὸν ἀμείνω·
 ἥτε καὶ ἀπάλαμδον περ δύος ἐπὶ ἔργον ἔγειρεν.
 εἰς ἑτερον γάρ τις τε ἴδων ἔργοιο χατίζει
 πλούσιον, διὰ σπείδει μὲν ἀρώμενας ἥδε φυτεύειν
 οἰκόν τ' εὖ θέσθαι· ξηλοὶ δὲ τε γείτονα γείτων
 εἰς ἄφενος σπείδοντ'· ἀγαθὴ δ' 'Ερις ἡδε βροτοῖσιν.
 καὶ κεραμεὺς κεραμεῖ κοτέει καὶ τέκτονι τέκτων
 καὶ πτωχὸς πτωχῷ φθονεῖ καὶ ἀσιδὸς ἀσιδῷ.

"So, after all, there was not one kind of Strife alone, but all over the earth there are two. As for the one, a man would praise her when he came to understand her; but the other is blameworthy: and they are wholly different in nature. For one fosters evil war and battle, being cruel; her no man loves; but perforce, through the will of the deathless gods, men pay harsh Strife her honour due. But the other is the elder daughter of dark Night, and the son of Kronos who sits above and dwells in the aether, set her in the roots of the earth; and she is far kinder to men. She stirs up even the shiftless to toil; for a man grows eager to work when he considers his neighbour, a rich man who hastens to plough and plant and put his house in good order; and neighbour vies with his neighbour as he hurries after wealth. This Strife is wholesome for men. And potter is angry with potter, and craftsman with craftsman, and beggar is jealous of beggar, and minstrel of minstrel." (Evelyn-White in Loeb Classical Library).

I have attempted the following free adaptation in verse.

THE STRIFE SISTERS

Beneath the age-long, far-flung strife of man
With man over the whole wide earth lurk two
Strife sisters. They are not twin, yet must be kin.

Blameless and beautiful the first and great,
Not to the crass and heavy mind that stands
Far off: but, closely known and understood,
Fair as a daughter of the gods to whom
Men make their songs of worship and of praise.

But not like-minded is the other one.
In human hearts she is the power behind
The throne and shapes its whispers, urging on
The ugly crash of battle axes sharp,
With clash of splintering spears in evil war.
O dark and strange her sway. Men love her not,
Yet some dark mystic spell from deathless gods
Her hateful name a noisy honor lends.

Not so that other, elder daughter, true:
Born from the travail of Dark Night, seized by
The Son of Kronos, waiting in the thin
And shadowy ether there and rushed to earth
By him and set beside the secret roots
Of human life on earth, she tends them well
And upward sends her kindly influence
Through all the branching sap of the great tree
Of men in every land and clime and time.

And when Ambition stirs some shiftless churl
To toil, or when a working neighbor shames
Some sluggard from his lazy bed, 'tis she
Who starts the effective thrill that makes him leap.
The rich man ploughs and plants, fully his house
Is filled, all things in order stored. Neighbor
With neighbor vies in hot and wholesome chase,
For all substantial gain. Potter competes
With potter, craft with craft, until we see
Beggar with beggar strive better to beg.
At last the minstrel feels the jealous sting
Some other singer's sweeter song inspires.

O Better Strife, up from Thy secret seat
Beside the roots of life sending to men
The inspirations for this peaceful war,
Great is thy name, goodly thy fame!

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FASTI CONSULARES

IN this paper an attempt has been made to supplement, largely on the basis of new material in the field of Latin Inscriptions, the excellent work of W. Liebenam, *Fasti Consulares Imperii Romani*, Bonn, 1909. *L'Année Épigraphique* has necessarily been the source for many of the inscriptions used, and it has been consulted through the issue for 1928. The list of consuls in the index of Dessau, *Inscriptiones Latinae Selectae*, III, I (1914), has been examined. The paper does not pretend to be complete for consuls whose years are not definitely known. The changes from Liebenam consist largely in the addition of consules suffecti not previously known, in a more exact dating within the year of consules suffecti, in the addition of elements of the names of consuls already known, and in the correcting on fuller information of dates previously assigned. The first three centuries of the Empire only have been considered.

18 A.D. C. Ru. . . . (perhaps C. Rubellius Blandus) with, or after L. Si. . . . (probably L. Seius Tubero), consules suffecti. (*Éphém. Épig.* IX, 778).

28 A.D. The colleague of Appius Iunius Silanus is given as Ti. Nerva Coceius in *Éphém. Épig.* IX, 890. Probably some error is involved.

36 A.D. M. Porcius Cato, consul suffectus at the end of the year. (*Not. Scavi*, 1917, p. 182 ff. The same reference for the years 37 and 38).

37 A.D. Imp. C. Caesar with Ti. Claudius Nero Germanicus, consules suffecti in July and August. A. Caecina Paetus with C. Caninius Rebilus, consules suffecti from September 1.

38 A.D. Ser. Asinius Celer with Sex. Nonius Quintilianus, consules suffecti from July 1.

48 A.D. A second cognomen Messala is perhaps to be added to the name of L. Vipstanus Publicola. (*A.É.* 1928, 98).

49 A.D. According to *A.É.* 1928, 98 the cognomen Longus belonging to the consul C. (?) Pompeius Longus Gallus should be read Longinus.

60 A.D. M. Manilius Vopiscus and C. Velleius Paterculus, consules suffecti, July 15. The difficulty of placing these consuls in July is discussed by Paribeni, editor of the new inscription, *Not. Scavi*, 1928, p. 388. It may be noted that the praenomen Gaius in place of Lucius might indicate that two Paterculi were consules

suffecti in the same year, though this seems improbable. Vopiscus, as first consul of the pair, seems to substitute for Salinator. It is probably of no significance that Seneca (*Q.N.* 28, 2), who alone before the discovery of this new inscription mentions this pair, gives their names in reverse order. Seneca gives only the cognomina, but the identity of his consuls and those of the inscription is fairly certain. His reference, too, places them in the year 60.

67 A.D. L. Iulius Rufus with L. Aurelius Priscus, who is found as consul suffectus to Fonteius Capito on June 20. (*Ausonia* VI (1911), p. 73; *A.E.* 1914, 219).

79 A.D. Rubrius Aelius Nepos and M. Arrius Flaccus, Sept. 8, are consules suffecti—the only suffecti so far known for this year. (*A.E.* 1927, 96).

88 A.D. M. Otacilius Catulus and Sex. Iulius Sparsus, Nov. 7. (*A.E.* 1927, 44). If L. Plotius Grypus is properly dated in October, these suffecti probably served a term of two months.

93 A.D. Sex. Pompeius Collega with Q. Peducaeus Priscinus, consules ordinarii. (*A.E.* 1910, 75; Dessaу 9059).

94 A.D. The name Calpurnius should be inserted after L. Nonius among the names of the consul ordinarius, Asprenas (*A.E.* 1910, 75; Dessaу 9059).

98 A.D. L. Maecius Postumus with Vicarius Martialis, consules suffecti in August. (*Studies in Philology* XIII (1916), pp. 199–208. The same reference for the years 99, 100, 101).

99 A.D. Sulpicius Lucretius Barba with Senecio Memmius Afer, consules suffecti in May and June.

Q. Fabius Barbarus Iulianus with A. Caecilius Faustinus, consules suffecti in July and August.

Ti. Iulius Ferox, colleague unknown, suffectus in September and October or November and December.

100 A.D. Imp. Traianus III with Sex. Iulius Frontinus III, consules ordinarii in January and February.

Imp. Traianus III, colleague unknown, in March and April. T. Pomponius Mamilianus with L. Herennius Saturninus, consules suffecti in May and June.

Q. Acutius Nerva, colleague unknown, suffectus in July and August.

C. Plinius Caecilius Secundus with C. Iulius Cornutus Tertullus, consules suffecti in September and October. L. Roscius Aelianus Maecius Celer with Ti. Claudius Sacerdos Iulianus, consules suffecti in November and December.

101 A.D. Q. Servaeus Innocens with M. Maecius Celer, consules suffecti, April-June.

Trebonius Proculus Mettius Modestus, colleague unknown, suffectus, July-September.

L. Arruntius Stella with L. Iulius Marinus Caecilius Simplex, consules suffecti, October-December. (For reference see under year 98).

109 A.D. P. Calvisius Tullus is shown to be consul ordinarius with A. Cornelius Palma. The inscription gives Tullus an additional cognomen, Russo, and gives Palma, Frontonianus. (*A.É.* 1927, 176).

115 A.D. L. Vipstanus Messalla with L. Catilius Severus Iulianus Claudius Reginus, who was suffectus to M. Pedo Vergilianus. (G. A. Harrer, *Studies in Syria*, pp. 24-25).

120 A.D. The praenomen of the consul suffectus Rutilius Propinquus is given as Lucius in a military diploma; but the praenomen Titus is supported by an inscription of the Arval Brothers. (*A.É.* 1909, 105; *C.I.L.* VI, 2080. Cf. *A.É.* 1925, 76 for Lucius).

126 A.D. The name of the consul ordinarius Ambibulus should apparently be completed by the addition of Q. Planius Sardus preceding the terms of his name already known. (*A.É.* 1911, 111).

127 A.D. On the evidence of a waxed tablet from Egypt F. W. Kelsey would change the nomen of the consul ordinarius Squilla Gallicanus from Gavius to Claudius. But the name Gavius is supported by adequate inscriptive evidence and by its use again in the name of the consul of 150 who was apparently the son of the consul of 127. (*Trans. Amer. Phil. Assoc.* 54 (1923), p. 193; *I.G.R.* IV, 24).

128 A.D. The praenomen and nomen of the consul ordinarius Torquatus Asprenas were L. Nonius. (*Trans. Amer. Phil. Assoc.* 54 (1923), p. 187 ff.).

191 A.D. The name of the consul ordinarius Pedo Apronianus should be preceded by the term Opilius. (*A.É.* 1910, 2).

192 A.D. Q. Tineius Sacerdos with P. Iulius Scapula Priscus, consules suffecti on March 16. (*A.É.* 1914, 84).

196 A.D. Perhaps the cognomen Priscus should be added to the names of the consul ordinarius Thrasea Paetus. (*A.É.* 1911, 158; *Éphém. Épig.* IX, 722).

211 A.D. C. Pomponius Magnus, consul suffectus. His term apparently belongs to this year since he seems to have been legatus and consul under Caracalla and Geta. (*A.É.* 1917-18, 76; *Prosopegraphia*, III, 77, 550).

218 A.D. The praenomen of the consul ordinarius Oclatinus Adventus was Marcus. (*Not. Scavi* 1918, pp. 224 and 236).

228 A.D. Q. Aiacius Modestus II with M. Maecius Probus,

consules ordinarii. A new inscription supplies the praenomina and nomina of these consuls. (*A.É.* 1919, 65).

232 A.D. L. Virius Lupus with L. Marius Maximus, consules ordinarii. A new inscription supplies the praenomina and nomina of these consuls. (*A.É.* 1909, 215).

233 A.D. L. Valerius Maximus with Cn. Cornelius Paternus, consules ordinarii on January 9. A new inscription supplies the praenomina and nomina of these consuls. (*A.É.* 1914, 259).

234 A.D. M. Clodius Pupienus Maximus II with (Agrico)la Urbanus, consules ordinarii. (*Not. Scavi* 1918, pp. 225 and 240; *Éphém. Épig.* IX, p. 527, add. to *C.I.L.* VII, 104).

237 A.D. The praeomen of the consul ordinarius Marius Perpetuus is given as Lucius by a military diploma of January 7. (*A.É.* 1912, 59).

245 A.D. Imp. M. Iulius Philippus with C. Maesius Aquilius Fabius Titianus, consules ordinarii. (*Rev. Arch.* 1924, p. 390, 65; *C.I.L.* X, 7345).

258 A.D. The nomen of the consul ordinarius Bassus seems to have been Mummius and not Pomponius. (*Oxy. Pap.* (1916), 1407, fr. 1, col. 1 and page 7).

CONSULS OF UNCERTAIN DATE

Calpurnius Piso with Manius Acilius, consules suffecti in October, perhaps about the year 20 B.C. The inscription was found in a burial place with another of the consuls of 23 B.C. A M. Acilius M.f. Caninus was quaestor about 28 B.C. (*Not. Scavi* 1921, p. 221; *C.I.L.* XIV, 153).

C. Fufius with Cn. Minicius, consules suffecti in September. They are assigned by the editors of the inscription to the reign of Claudius. Possibly they should be identified with C. Fufius Geminus and L. Caninius Gallus, who were consules suffecti in the same part of the year in 2 B.C. (*A.É.* 1919, 51).

Favonius, legatus of Divus Augustus and Tiberius, proconsul of Asia very probably in the reign of Tiberius, was consul probably in one of the last years of Augustus' reign. (*A.É.* 1914, 136; Dessau 9483).

L. Cornelius Pusio Annius Messalla, consul suffectus perhaps in the reign of Claudius, 41-54 A.D. (*A.É.* 1915, 60; *C.I.L.* VI, 31706).

P. Calvisius P.f. Ruso L. Iulius Frontinus with L. Iunius Caesennius Paetus, consules suffecti on March 1, in the reign of Vespasian, perhaps in the year 79. (*Jour. of Rom. Studies* 1913, p. 302; *Pauly-Wiss. Suppl.* I, 269).

Ducenius Verus was consul suffectus after 88 in Domitian's reign, or in the reign of Nerva or Trajan. (*A.É.* 1927, 44; *Digest* 31, 29).

Q. Fulvius Gillo Bittius Proculus, consul suffectus perhaps in 98 or 99 A.D. (*B. Ph. W.* XXXVIII (1918), 1013).

M. Pompeius Macrinus Theophanes, consul suffectus perhaps in 99 or 100 A.D. (*B. Ph. W.* XXXVIII (1918), 1013).

Lucius Cornelius with Marcus Coelius, consules suffecti on March 17, perhaps at the end of the first or the beginning of the second century. (*Rev. de Phil.* XXXVI (1912), p. 75, no. 48).

L. Antistius Gal. Rusticus, consul suffectus in the reign of Domitian around 90 A.D. (*Trans. Amer. Phil. Assoc.* 55, (1924), p. 5 ff.).

C. Curtius Iustus with P. Iulius Nauto, consules suffecti, probably in the reign of Antoninus Pius, since Iustus was governor of Moesia Superior around 160, a position ordinarily held not long after the consulship. (*A.É.* 1922, 135; *C.I.L.* V, 5809; Stout, *Governors of Moesia*, p. 26; Domaszewski, *Rangordnung*, p. 182; *Sammelb. Griech. Urkun. aus Aeg.* III, n. 6304).

C. Vettius Sabinianus Iulius Hospes, consul suffectus late in the reign of Marcus Aurelius or early in the reign of Commodus. (*A.É.* 1920, 45; *Prosopographia* III, 413, 339; *C.I.L.* III, 4426; VIII, 823 and 12346; Dio (Boissevain), 73, 3).

Priscus and Clarus, May 18, under Commodus. (*A.É.* 1928, 86).

Ti. Iulius Pollienus Auspex, consul suffectus late in the second century or in the third. (*A.É.* 1915, 16).

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1930
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ARCHAEOLOGICAL NEWS¹

NOTES ON RECENT ARCHAEOLOGICAL EXCAVATIONS AND DISCOVERIES; OTHER NEWS

EDWARD H. HEFFNER, *Editor*

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PREHISTORIC, ORIENTAL AND CLASSICAL

EGYPT

Fifth Dynasty Relief.—In *Ber. Kunsts.* li, 1 (1930), pp. 4-7 (fig.), SHÄFER writes about a limestone relief in Berlin, which he assigns to the school of Memphis at the end of the Fifth Dynasty, about 2500 B.C. He thinks that the tomb to which the figure belonged may be found at Sakkâra. Except for the hands, the upper part of the man's body is fairly well preserved as far down as the apron. The statue is believed to have held a long stick in the right hand and a short sceptre in the left. The vestiges of color are well preserved and very instructive. The anatomy of the body is very interesting.

MEYDUM.—In *The Illustrated London News*, Mar. 22, 1930, pp. 459-463, 500-502 (23 figs.), ALAN ROWE reports on finds by the University of Pennsylvania Museum Expedition at Meydum, where work was commenced November last. Extensive investigations have been carried out on the huge pyramid, which originally measured 302 feet in height. For the first time we have photographs showing the interior of the structure. Many burials without coffins, others in reeds or palm leaves, and some made by means of coffins have been discovered.

In *Ibid.* Apr. 5, 1930, pp. 564-567 (21 figs.) is given a second account of the results of these excavations. Very interesting is the coffin of Gemesh, or Kagemesh, who, because of the late Bronze Age objects found with the burial, is believed to have come from Cyprus. The coffin is rectangular in shape and vividly painted in bright colors. Vignettes decorate the sides and ends. An interesting feature is a representation of a sacred eye. Two mummies were contained in the tomb. Another important coffin contained portion of a common Egyptian prayer. Numerous tombs, many of which had been partially plundered, yielded a considerable variety of objects.

In *Ibid.* Apr. 19, 1930, pp. 676-677 (9 figs.) is reported the very important discovery of twenty-nine simple burials and a complex of a hundred and one coffined mummies. Amulets and scarabs are numerous. Most of the coffins belong to the Twentieth Dynasty or later times (*ca.* 1200 B.C.), although a few date as far back

¹ The departments of Archaeological News and Discussions and of Bibliography of Archaeological Books are conducted by Professor HEFFNER, Editor-in-charge, assisted by Professor SAMUEL E. BARRETT, Professor CARROLL N. BROWN, Miss MARY E. BUCKINGHAM, Professor SIDNEY N. DEANE, Professor ROBERT E. DENGLER, Mrs. EDITH HALL DUJAN, Mr. VLADIMIR J. FEWKEE, Professor HAROLD N. FOWLER, Dr. STEPHEN B. LUCE, Professor RALPH VAN DEMAN MAGOFFIN, Professor CLARENCE MANNING, Professor ELMER T. MERRILL, Professor LEWIS B. PATON, Professor JOHN C. ROLFE, Professor JOHN SHAPLEY, Professor KENNETH SCOTT, Professor FRANCIS J. TECHAN, Professor AXEL J. UPFALL, Professor SHIRLEY F. WEDDE, and the Editors.

No attempt is made to include in this number of the JOURNAL material printed after June 30, 1930. For an explanation of the abbreviations see Vol. xxxiv, 1, p. 121, and Vol. xxix, 1, pp. 115-116.

as the Twelfth Dynasty (*ca.* 2000 B.C.). Many are badly broken; some, on the contrary, are in a good state of preservation.

In *Ibid.* May 17, 1930, pp. 878-879 (7 figs.), is a report on the important work recently carried out on the causeway and the pyramid temple.

ASSYRIA AND BABYLONIA

KISH.—In *The Illustrated London News*, Feb. 8, 1930, pp. 206-207 (5 figs.), Prof. STEPHEN LANGDON summarizes the results achieved by recent search on the site of Kish. The present report supplies us with a colored photograph of the famous Sumerian head, now restored. These excavations are regarded as furnishing conclusive proof that the city was inundated by a flood at about 3300 B.C. Dr. Langdon supplies a very helpful plan showing the stratifications.

UR.—In *The Illustrated London News*, Feb. 15, 1930, p. 256, is shown a picture of the steatite figure of a wild boar, the oldest piece of sculpture from Ur.

C. LEONARD WOOLLEY (*The Illustrated London News*, Mar. 1, 1930, pp. 326-327 (7 figs.)) describes a few of the recent finds at this site, curious bird-headed figurines recovered from graves as well as ceramic ware unearthed amongst burial remains.

URUK.—Report has been made (*The Illustrated London News*, June 7, 1930, pp. 1017-1019 (9 figs.)) of recent discoveries in Iraq, on the site of Uruk, the Biblical Erech, by the German archaeological expedition headed by Dr. Julius Jordan. The site is that of the mythical King Gilgamesh. The most important find of the last season was a small Innnin sanctuary. Certain architectural decoration consisting of lines cut in stone to represent flowing water seems to be unparalleled in Mesopotamia. Another excellent figure is that of a bull. Very many tablets and inscribed bricks have been found. Much light is shed by these excavations on the interrelations between this site and Ur.

SYRIA AND PALESTINE

Many Relics of the Old Stone Age.—Professor George Grant MacCurdy of Yale University, Director of the American School of Prehistoric Research, has just received word from Dr. Hackett, who with Mr. Theodore D. McCown is representing the School in the latter's joint excavations with the British School of Archaeology at Jerusalem, that during the first ten days of April no less than 5,000 tools dating from the Aurignacian Epoch of the Old Stone Age were dug from a single cave of the group south of Haifa. Miss D. A. E. Garrod of the British School is in charge.

PETRA.—In *The Illustrated London News*, Feb. 1, 1930, pp. 160-161 and 192 (6 figs.). AGNES ETHEL CONWAY reports the results of an expedition recently dispatched to Petra. The stratifications in the rubbish dumps were examined, in which were found Attic black-glazed ware of the fourth century B.C. In the same level were found Hellenistic lamps, fragments of pottery belonging to the third and second centuries B.C., and pieces of cooking pots. Fine, thin, painted pottery fragments are very numerous. Apparently the Nabateans were very skilled craftsmen. Objects showing considerable variety of influence, Ptolemaic, Parthian, South Arabian, were found among the native remains. This best Nabatean work is placed between 150 B.C. and 100 A.D., or prior to the conquest by the Romans.

The rock-cut tomb chambers were also explored. The shaft graves yielded objects similar to those found in the lowest level of the dumps. Burial in quicklime, apparently a unique practice in antiquity, is evidenced by some of these graves. The problem of the graves at this site is very puzzling. The antiquities

obtained by this expedition have been placed in the Cambridge University Museum of Archaeology and Ethnology.

ASIA MINOR

EPHESUS.—Under the title of *Zu Bronzen aus Ephesos*, FR. EICHLER (*Jh. Arch.* I. xxiv (1929), pp. 198–219) describes a number of recently discovered bronzes: a Heracles and Centaur, two tree-candelabra, the capital-like top of a candelabrum and several other small pieces.

GREECE

Archaeology in 1928.—In *B.C.H.* lii (1928), pp. 466–510 (11 figs.), there is the usual report of the work done in Greek lands during the year. First place is given to the magnificent bronze statue of Poseidon or Zeus, dating in the fifth century B.C., found in September, 1928, in the sea off Artemision in Euboea, the head of which is illustrated. Next, the excavations of Dinsmoor on the western slope of the Acropolis and of Brückner in the Ceramicus are noted. In Attica the work of Kourouniotis at Eleusis is discussed at some length. In the Peloponnesos a number of pages are devoted to the American campaign at Corinth, giving a description of the Odeum, now completely laid bare by Broneer. The work carried on during the year at the Theatre by Shear received most of the space. Then follows an account of the important exploration of the Larissa of Argos by Vollgraff (2 figs.), the work of Blegen at the Argive Heraeum, and at Hagiorgitika, and of Orlandois in the Stymphalian plain. Brief accounts are given of other undertakings in the Peloponnes. In Northern Greece two pages are devoted to the work of Keramopoulos at Thebes, four to the excavations of Poulsen and Rhomaios at Kalydon, and a page and a half to various investigations in Thessaly. In Macedonia the campaigns of D. M. Robinson at Olynthus, of Heurtley at Molivopyrgo, and of Collart at Philippi receive the greatest attention. The excavations of the British at the Hippodrome at Constantinople are summarized. In the Eastern Islands the work of the French at Thasos is described (3 figs.) at some length, and of the Italians at Lemnos. Some account is given of important work done in South Russia under the auspices of the museum of Odessa.

For the Cyclades and Crete, by far the most space is devoted to the French campaign at Mallia (4 figs.), which yielded important results.

The report ends with accounts of explorations of the Greeks at Lesbos, the campaigns of the Germans at Samos, Ephesus, and Aezani, and of the Swedish mission under Gjerstad at Cyprus.

Archaeological Work in 1928–1929.—A. M. WOODWARD's annual summary of the archaeological work of various national groups in Greece for the year 1928–1929 is published in *J.H.S.* xlix (1929), pt. ii. (pp. 220–239; 6 figs.). The work reported by the American School was in the theatre and other areas in Corinth. The British School worked on two prehistoric mounds in Macedonia, on the sites of Methymna and prehistoric Thermi in Lesbos, and at Eleutherna in Crete, with some additional discoveries and reconstruction at Knossus. The French School continued work on the palace at Mallia in Crete and the Poseideion in Thasos, and at Philippi. The German School continued work at the Ceramicus in Athens, where the pottery trade seems to have survived into late times; in Mycenaean shaft-graves and chamber tombs in Aegina; at the Heraeum in Olympia, where Dr. Doerpfeld distinguishes three superimposed structures; and at the Heraeum and at Tigrani in Samos. The Greek Archaeological Service made some discoveries at the foot of the Niké bastion in Athens; at the Amphiareion at Oropos; at the south gate of the sanctuary at Eleusis, at the Bronze Age palace in Thebes,

where a trade factory for works of art was found; at a sanctuary of Demeter some eighteen miles from Lilaea in Phocis; at New Anchialos in Thessaly, where there are two Christian basilicas and an inscribed stone from the temple of Demeter at Pyrasus; on the site of Potidea in Pallene; at Calydon, with Danish co-operation, in a fifth-century temple of Apollo Laphrius; in two Mycenaean cemeteries in Achaia; at Clopede in Lesbos; in late Mycenaean and Geometric burials near Canaea and Candia in Crete; and in Ithaca, with a view to clearing the Ithaca-Leucas controversy. The chance recovery from the sea of one of the finest works of Greek art, in the bronze statue of a god, is an event of outstanding importance. The Swedish Mission working in Cyprus completed the excavation of the fifth-century palace at Vouni, finding a gold and silver treasure of bowls, jewelry, and late fourth-century coins; then established the site of the town of Marion, later rebuilt as Arsinoe; and found a Neolithic settlement of three periods, the earliest without pottery, on a small island a few miles from Vouni. At Constantinople the British Academy identified the Baths of Zeuxippus and the Gymnasium of Zeuxippus, built by Septimius Severus and still containing the bases of some statues mentioned by the poet Christodorus, about 500 A.D.; and collected material of value for the study of Byzantine pottery.

Greek Epigraphy in 1927-1928.—The discoveries and published material on Greek inscriptions for the year 1927-1928 are covered in an astonishingly comprehensive summary, with 650 numbered footnote references, by M. N. Top, in *J.H.S.* xl ix (1929), pt. ii (pp. 172-216). After six pages on general works, the field is divided geographically—Attica; The Peloponnes; Central and Northern Greece; Macedonia, Thrace and Scythia; The Islands of the Aegean; Western Europe; Asia Minor; Syria and Palestine; Africa,—Egypt and Nubia being treated elsewhere.

ARTEMISIUM.—The bronze figure discovered at this place a few years ago, and then believed to represent Poseidon, can be recognized by comparison with archaic figures as a Zeus hurling the thunderbolt (*The Illustrated London News*, Mar. 29, 1930 (2 figs.)).

ATHENS.—In *The Illustrated London News*, Jan. 25, 1930, pp. 138-139 (11 figs.), is given a brief summary of the highly beneficial work of restoration on the Erechtheum, the Parthenon, and the Propylaea.

ITALY

Model Chariot.—In *Bull. Ont. Mus.* 9 (Jan. 1930), pp. 7-8 (fig.), J. H. ILIFFE reports the recent acquisition by the Royal Ontario Museum of a model bronze chariot, 10½ inches long, apparently found in a tomb on the Venetian coast, and therefore probably of Greek origin (rather than Etruscan), and dating in the fourth or the third century B.C.

Syracusan Tetradrachm by Eukleidas.—In *B. Mus. F. A.* xxviii (Feb. 1930), pp. 10-12 (7 figs.), GRACE W. NELSON reports on an important acquisition by the Boston Museum of Fine Arts, a Syracusean silver tetradrachm of 413-412 B.C. The obverse bears the facing head of Athena, the reverse a quadriga driven by Persephone. The artistic details of the coin are brought out with fine precision and its state of preservation is very good.

NEMI.—Palisade.—In *The Illustrated London News*, Feb. 8, 1930, p. 195 (5 figs.), is shown a mysterious “palisade” of stout timbers on the west bank of Lake Nemi, which has been laid bare in the course of the lowering of the water while the “house-boats” of Caligula are being exposed.

ROME.—Excavations at the northern side of the Capitoline between the Victor Emmanuel Monument and the Church of Santa Maria in Ara Coeli have led to

the discovery of a very unusual type of residence originally no less than seven stories high. The building belongs to the second century A.D.

Market of Trajan.—In *The Illustrated London News*, Dec. 28, 1929, pp. 1130-1131 (6 figs.), announcement is made of the completion of excavations in the Market of Trajan, a structure designed by Apollodorus of Damascus and used in part as shops by the merchants whose earlier quarters in the *tabernae* were destroyed. One hundred and fifty shops have been found and also the remains of what is believed to be a commercial court, or a *praetorium*.

SARSINA.—Professor FEDERICO HALBHERR reports to *The Illustrated London News*, Apr. 12, 1930, p. 617 (4 figs.), the accidental discovery of tombs lining both sides of the road at Sarsina, where a landslip had caused a diversion in the course of a river that led to the covering of the necropolis under a heavy layer of mud. A head of a man, most of the face of which is preserved, is a very fine example of realistic portraiture. The tombs were as much as 30 feet high and show heavy Greek influence in their architecture. The remains belong to late Republican and early Imperial times. A more detailed account of the official report on these excavations will be published in the next issue of this JOURNAL.

SELINUS.—**Ephebus.**—In *The Illustrated London News*, Feb. 1, 1930, p. 178 (4 figs.), is shown the reconstruction of the bronze ephesus of Selinus, a restoration carried out in the course of the past year. Now, after the assembling of the many pieces into which the statue had been broken, it is concluded to be the chief of the archaic Greek bronzes from Sicily. Professor Rizzo and Dr. Marconi assign the figure to the same art of Selinus as is shown in the metopes of the Temple of Hera. The indications of local art, in spite of Attic influence, are very evident. Dr. Pirro is reported to assign the statue to the second quarter of the fifth century B.C.

VISENTIUM.—**Pre-Etruscan Shield.**—In *The Illustrated London News*, Dec. 21, 1929, p. 1093 (4 figs.), Professor FEDERICO HALBHERR reports the discovery at Visentium, in the Volsinian territory, of a tomb of a warrior, in which were contained vases and weapons, among which is a bronze shield showing beautiful decoration. Ionic Greek influence is shown in a large brazier, the base of which is in the form of a chariot bearing figures of human beings, a good piece of open bronze-work.

FRANCE

BOUZONVILLE.—**Celtic Bronzes.**—In *Archaeologia* 79 (1929), pp. 1-12 (14 figs.), REGINALD A. SMITH writes very interestingly about the Celtic bronzes discovered at Bouzonville, Lorraine, in February, 1928. Two wine jars, 16½ and 15 inches respectively in height, were found. Still more important is a pair of elegant flagons, the art of which is of a very high order. They help much in the understanding of certain features of Celtic history. Our knowledge of the use of enamel and coral is especially enriched by this find. The bronzes have been acquired by the British Museum.

GERMANY

PEGAU.—**Bell Beaker.**—In *Mannus*, xx, 4b, pp. 416-417 (2 figs.), RUDOLF MOSCHKAU describes a rare bell beaker with a handle, formerly kept in a private collection. The beautiful vessel was probably found at Pegau, near Leipzig, in the vicinity of which six bell beakers were recently discovered. Unfortunately, the owner of the collection left no information regarding this highly interesting and important find. Nevertheless, the beaker is significant in the study of decorative motifs of the central European bell beaker culture.

WIEDERAU.—**Bell Beaker.**—In *Mannus*, xx, 4b, pp. 408-415 (9 figs.), KURT

BRAUNE reports on six ceramic vessels and one slate bracer of the bell beaker culture type, found accidentally by workmen in a gravel pit at Wiederau near Leipzig. This culture is rather sparsely represented in Saxony and its authentic discoveries are scanty. The bracer is the first one ever found in Saxony. The bell beakers described consist of three typically decorated and three undecorated vessels, found at the depth of 180 cm. and 60 cm. respectively. Although the undecorated pots were found only 60 cm. under the surface, Braune assigns them to the same bell beaker culture on the basis of color, texture, and form. The site also yielded certain vestiges of La Tène culture. The six beakers are ascribed to the Thuringio-Saxon group of the bell beaker culture.

ZEVEN.—*Flint Artefact.*—In *Mannus*, xx, 4b, pp. 418-420 (1 fig.), HANS MÜLLER-BRAUEL writes about an almond-shaped flint artefact, found in Zeven County, Germany. The tool is 130 mm. long, 72 mm. broad, and 6 mm. in thickness. Although the exact locality of the find is unknown, typologically the implement belongs to the Mesolithic culture.

CZECHOSLOVAKIA

Archaeological Expedition.—The second American Archaeological Expedition to Central Europe under the direction of V. J. Fewkes and maintained jointly by the Museum of the University of Pennsylvania and the Peabody Museum of Harvard began its explorations in the middle of June, 1930.

Approximately four months will be devoted to excavations in the various provinces of Czechoslovakia. The plans call for brief visits to several museums in Germany on the way to Prague, where permanent headquarters are maintained at the Archaeological Institute. The program contemplates excavations in southern Bohemia on a group of mounds dating from the late period of the Central European Bronze Age. These tumuli, usually containing multiple burials with metal and ceramic offerings, are located in a forested region. They can thus be worked before the harvest season will permit open field operations. A series of small caves, which are known to have yielded vestiges of Neolithic and Eneolithic culture levels, will be explored next. The rest of the season will be devoted to the excavation of three sites which were only partially investigated by the First Expedition conducted by the same two institutions last summer. In these sites, important discoveries were made last season and the staff has high hopes of securing additional data which will help to approach, if not solve, some of the most important problems of Central European prehistory. The Expedition will endeavor to secure material representing the cultures that were not found last year and thereby to complete the synoptic series of fourteen prehistoric periods in the very heart of Europe.

The territory of Czechoslovakia presents one of the most important and interesting regions for archaeological research. From the Middle Paleolithic period on, this portion of Europe was continually occupied by various races, whose gradual cultural development is amply exemplified by a vast number of habitation sites and graves. For ages, the lands now forming the Republic of Czechoslovakia have been an important meeting ground for the main avenues of culture diffusion on the continent of Europe. While a thorough system of chronology and a sound, well recognized school of archaeology have long been established by the Czechoslovakian scholars in prehistory, there are still a number of vital problems to be solved. Certain phases of the cultural growth are only partly known and new; puzzling discoveries are not uncommon. The American School of Prehistoric Research, under the direction of Dr. G. G. MacCurdy of Yale University, is planning to participate in the Expedition's work in September.

After the close of field explorations, part of the staff will journey to Hungary and Jugoslavia to do archaeological reconnaissance work and to make arrangements for excavations in those countries.

ALBANIA

BUTRINTO.—Recent Excavations.—At the site of the ancient Bouthrotum LUIGI UGOLINI has found the remains of important public buildings consisting of a theatre originally built in the third century B.C. and reconstructed in Roman times and a shrine of Aesculapius. Some excellent Greek and Roman sculptures were found with the theatre, among which the most notable is a noble statue of a goddess, a beautiful head of Augustus, and that of a Bacchus (*The Illustrated London News*, Jan. 4, 1930, p. 25 (6 figs.)).

JUGOSLAVIA

VINČA.—Recent Discoveries.—At Vinča, on the southern bank of the Danube about nine miles below Belgrade, further investigations in 1929 yielded significant results. Earlier search had brought forth objects parallel in date with those of the second and the sixth city of Troy; the latest digging uncovered La Tène materials. At this site Aegean and central European culture were combined. Much pottery has been found. The investigations are to be continued (*Ant. J.* x, 2 (Apr. 1930), pp. 155–156).

ROUMANIA

JAŚL.—New Acquisitions.—In *Arta și Arheologia*, ii, 4 (1930), O. TAFLALI lists with brief comment the objects recently acquired by the Museum of Antiquities. A terracotta oenochoe of the second or third century A.D. shows in one scene Dionysus and Silenus and in another Pan and a nymph or a Bacchante. A broken small statue of a female figure, probably Abundance, was found at Tomis near Constanța. This piece is assigned to the first or the second century B.C. Sixteen fragments of vases found at Callatis give new names of archons and also of vase makers.

HUNGARY

Prehistoric Finds.—In *Archaeologai Értesítő*, xlivi, pp. 238–247, ANDOR SAÁD reports on excavations in the Istállóskő cave and the Szeleta cave which show the similarity of unity of the Aurignacian and Magdalenian culture-cycles. They show the great age also of the Hungarian Proto-Solutrian culture and indicate the west European origin of the Aurignacian.

ÓSZENTIVÁN.—**Vases Incised with the Nail.**—In *Archaeologai Értesítő*, xlivi, pp. 23–34, JANOS BANNER calls attention to the fact that excavations at this site have revealed fragments of a rough and uneven pottery decorated with holes and incisions made by the finger and the nail without the use of any special instrument. These remains can now be placed in chronological sequence and they seem to belong to the Tisa culture. They came in the late Neolithic period and continued to the end of the Bronze Age.

SZEKELYHID.—**Gold Find.**—Two gold brooches, the residue of a collection that one time numbered eight pieces, 9.1 and 8.5 cm. respectively in diameter and originally weighing apparently 28 grams, have been found (MARTON ROSKA in *Archaeologai Értesítő*, xlivii, pp. 41–44).

SENTENDRE.—**Roman Stone Monuments.**—In *Archaeologai Értesítő*, xlivi, pp. 45–57, BALINT KUZSINSZKY describes some Roman inscriptions hitherto unpublished. One was set up by L(ucius) Atticus Atticinus and C(aius) Atticus

Verecundus decuriones to Mercury, a rare god on Pannonian inscriptions. Another object found is a relief of a griffin, also rare in this region.

SZENTES.—In *Archaeologiai Értesítő*, xlvi, pp. 258–265, ELEMÉR SCHUPITER writes about the latest excavations in this place. The gold work seems to be made largely on a definite pattern of symmetry but with some individual arrangements.

ZAGYVAPALFALVA.—**Bronze Age Remains.**—In *Archaeologiai Értesítő*, xlvi, pp. 35–40, JENŐ HILLEBRAND summarizes the recent work at this place and points out that the cemetery must have originally contained about four hundred urn graves, no two urns from which are identical in shape. The bodies were not burned directly on the pyres. Soul stones, possibly traces of a pebble cult, survive. The work on this site seems to be completed now.

GREAT BRITAIN

ASTON TIRROLD.—**Prehistoric and Roman Finds.**—In *Ant. J.* x, 1 (Jan. 1930), pp. 49–50, J. W. WALKER announces the discovery within the past few years of pottery of the second and the third century A.D., remains of animals and humans, and a few Roman coins. The pottery consists of red Samian ware and there are also some grey and brown pieces. Prehistoric objects also were found.

DIDCOT.—**Romano-British Objects.**—In *Ant. J.* x, 1 (1930), pp. 50–51, J. W. WALKER writes about a few human skeletons and pottery remains accidentally found at this spot. It appears from a study of the physical types represented that some of the persons buried here came from Italy and Gaul; one was apparently a Roman military officer.

ISLE OF MAN.—**Ship-Burial.**—In *Ant. J.* x, 2 (Apr. 1930), pp. 126–133 (3 figs.), P. M. C. KERMODE reports on the discovery of the remains of a ship-burial on the Isle of Man. The objects uncovered consist of parts of the hero's sword, spear, tools, iron rivets used in the construction of the boat, fragments surviving from the harness of his horse, as well as bone remains from this animal and a dog. This find is of particular importance because of the small number of such burials hitherto uncovered in the British Isles. Comparison is made with other known examples of this type of interment.

KENT.—**Jug from Transalpine Gaul.**—A beautiful jug, 5 inches high and 4 inches in diameter, which is believed to have been manufactured at St. Rémy-en-Rollat, has been found at Bapchild, near Sittingbourne. The vessel belongs to the period of Tiberius or Claudius.

LEICESTERSHIRE.—**Roman Bust.**—In *Ant. J.* x, 2 (Apr. 1930), pp. 169–170 (pl.), is reported the recent discovery at Hinckley of a limestone bust, 15 inches high and 10 inches wide at the base, apparently a representation of a Roman of the first century A.D. The treatment of the hair and the general character of the face are very suggestive of Augustus or Trajan. The site where the bust was discovered may have been occupied by the Romans.

LITTLE DOWNHAM.—**Bronze Age Burials.**—In *Ant. J.* x, 2 (Apr. 1930), pp. 162–164 (pl.; fig.), report is made of the accidental discovery of well preserved pottery of the overhanging-rim type and also of bone remains of a few Bronze Age burials at this town in Cambridgeshire.

MEARE.—**Bronze Scabbard.**—The discovery of a bronze scabbard at Meare, Somerset, is reported. The length is 30½ inches, and the artistic features connect the sheath with La Tène II. This find adds an important specimen to a list of similar objects (*Ant. J.* x, 2 (Apr. 1930), pp. 154–155 (fig.)).

STANWICK, HANTS.—**Bronze Age Finds.**—In *Ant. J.* x, 1 (Jan. 1930), pp. 30–33 (fig.), CHARLES F. FOX reports additional discoveries in the clay pit at Stanwick. In working at the bottom of the previously opened shaft at a depth of

about 17 feet workmen came upon a new shaft, which led down to a total depth for the entire digging of about 24 feet. In this new shaft stood an oak post, 5 feet high and 8 inches in diameter. The thickness is uniform and indications of various kinds lead to the conclusion that the post was set up for some very specific purpose which still lacks explanation. The material surrounding the post was very carefully submitted to chemical examination, which would indicate that the remains are the result of burning blood on the spot. Possibly the pit was employed to entrap animals whose remains were from time to time burned to clear the spot for further use.

STONEHENGE.—Excavations have recently revealed a second blue-stone lintel (*Ant. J.* x, 2 (Apr. 1930), pp. 152-153 (2 figs.)).

WEST RUNTON, NORFOLK.—**Polished Hand-Axe.**—J. REID MOIR reports on a flint implement found at this place. The axe is unusual in that after being flaked part of each side was polished. Close dating is impossible; it may be Paleolithic or Neolithic (*Ant. J.* x, 2 (Apr. 1930), pp. 143-145 (fig.)).

WEYMOUTH.—**Roman Coins.**—In *Bull. Ont. Mus.* 9 (Jan. 1930), pp. 3-6, J. H. ILIFFE reports on the acquisition by the Royal Ontario Museum of a collection of fifty-four Roman coins unearthed, together with some others, a few years ago at Weymouth. The coins belong to the fourth century A.D. and are important for the light that they throw upon relationships between the mints and other historical facts.

EARLY CHRISTIAN, BYZANTINE AND MEDIAEVAL ASSYRIA AND BABYLONIA

Islamic Vessel.—In *Ber. Kunsts.* li, 1 (1930), pp. 7-11 (6 figs.), F. SARRE reports on a significant amphora-like vessel recently acquired from Baghdad. The neck and shoulders are richly decorated with relief work that is particularly instructive because of the several features of very ancient Mesopotamian art retained in this later work. One of the most readily traceable of these elements of ancient art of the Near East is a scene in which a man struggles against a winged creature, the embodiment of evil. The object is a good illustration of survivals in the art of this region, a fact which the author of the report has stressed previously.

ITALY

Catacombs of Prestato.—Two very beautiful, richly sculptured sarcophagi have been found in the Catacombs of Prestato on the Appian Way, one of which apparently shows a marital pair on its lid, the other of which is decorated with a series of Cupids (*The Illustrated London News*, Feb. 22, 1930, p. 296 (2 figs.)).

Church of St. Sebastian.—Rather extensive excavations have lately been made at the church of St. Sebastian, on the Via Appia Antica, near Rome, where in addition to considerable remains of the church proper portions of a two-story house deeply buried under detritus have been uncovered. The residence shows very important mosaic pavement, a few frescoes in an excellent state of preservation, one of which apparently gives a view of part of Rome, and also some interesting graffiti, which may refer to gladiatorial combats (*The Illustrated London News*, Feb. 22, 1930, pp. 290-291 (7 figs.)).

Mediaeval Tuscan Paintings.—In *L'Arte*, xxxiii (1930), pp. 1-15 (5 pls.), P. TOESCA publishes several interesting paintings in the Museum of Berne, Switzerland, that are of early date. One, a Madonna and Child with six angels, is clearly the work of Duccio, with its closest analogy in an enthroned Madonna in the Academy of Fine Arts at Siena. Both these paintings are very early examples

by the master. Another painting, of the enthroned Madonna and saints, probably the central panel of a triptych, is to be attributed to Taddeo Gaddi; it is closely similar in style to Taddeo's triptych in the Kaiser Friedrich Museum. Another early triptych at Berne with the Crucifixion in the middle, is by Bernardo Daddi.

PISA.—*Oriental Ceramics.*—In *Faenza*, xvii (1929), pp. 113-121 (2 pls.; 3 figs.), G. BALLARDINI publishes a number of lustre plates that decorate the façades and campanile of the church of S. Sisto at Pisa. They are important and rare examples of eleventh-century Oriental work.

ROME.—“*Catacomb of the Widowers.*”—In *The Illustrated London News*, Apr. 26, 1930, pp. 720-721 (10 figs.), FRANCESCO FORNARI makes a preliminary report on the discovery of a catacomb during the construction last year of a road connecting the Via Salaria and the Via Tiburtina at a point near the Basilica di S. Lorenzo. The galleries had been in large part filled up with ground from earlier excavations and were thus to a degree protected. Thus the *loculi*, inscriptions, coins, vessels, statuettes, and lamps were preserved nearly as they were in the fourth century, the date suggested for the cemetery. The fact that so many of the inscriptions were dedicated to wives suggested the name for the catacomb. Typical objects usually found in these Christian tombs were uncovered in considerable number, but especially fortunate was the finding of two very well preserved specimens of glass plate with gold leaf, objects, which because of their fragility are seldom found so nearly intact.

TORRICELLA PELIGNA.—*Gothic Bronze-Work.*—In *The Illustrated London News*, Dec. 21, 1929, p. 1093 (4 figs.), PROFESSOR FEDERICO HALBHERR announces the discovery at the above site, in the Abruzzi, of a Gothic helmet of gilded copper illustrating a type of head-covering of which but few examples survive. The Italian centre of this Byzantine art was probably Ravenna.

AUSTRIA

SCHWECHAT.—*Merovingian Graves.*—In *Mitt. Anth. Wien*, lix, 5/6, 323-332 (9 figs.), A. SARACSI writes about eight Merovingian graves discovered at this site near Vienna. Parts of the skeletons, glass beads, bone combs, silver fibulae, iron knives, clay buckles, gold and bronze trinkets, an iron shield, clay spindle whorls, and other objects belonging to the second half of the seventh century A.D. were found. The remains suggest the Langobards.

HUNGARY

BÁGYOD.—*Cemetery of the Migration Period.*—In *Archaeologiai Értesítő*, xlvi, pp. 248-258, ELEMÉR LOVAS describes a cemetery of the period of the migration found near Bággyod. Swords of the Oriental type and other interesting objects were found.

GERMANY

WOLFENBÜTTEL.—*Grave Remains.*—In *Mannus*, xx, 4b, 425-428 (3 figs.), VON KRONE gives an account of four graves of the sixth and seventh centuries A.D., discovered in Wolfenbüttel County. The burials consisted of extended skeletons accompanied by scanty furniture comprising iron knives, amethyst and glass beads, and a bronze cross with traces of enamel.

In a post-script to this article, p. 428, G. KOSSINNA dates the bronze cross with enamel as belonging not to the sixth or seventh, but to the eighth, if not indeed the ninth century A.D.

NORWAY

KVALSUND.—**Boats of Migration Period.**—In *The Illustrated London News*, Dec. 28, 1929, p. 1145 (4 figs.) are shown remains of two boats which HAAKON SHETELIG is reported to assign to about 600 A.D. and which were discovered at the above mentioned site, southwest of Aalesund.

RUSSIA

Finnish Cemetery of Thirteenth and Fourteenth Centuries.—In *Publications of the Lower Volga Regional Museum*, 1928, 1, pp. 4-30, N. K. ARZYUTOV describes a cemetery in which forty graves have been excavated, three of which contained only bones of horses. The men were buried on the back with the arms slightly bent, the women on the side, generally the right. Not many objects of value or interest were found. The importance of the discovery lies in the fact that it shows the farthest southern point thus far located to which the Finns spread in these centuries.

GREAT BRITAIN

CANTERBURY.—**Recent Finds.**—At St. Austin's Abbey, Canterbury, there have recently been discovered an enamelled copper button assigned to the Saxon period, a bronze plate with two dies antedating the tenth century, and a seal-matrix of William of Cornhill (d. 1223) (*Ant. J.* x, 2 (Apr. 1930), pp. 167-169 (3 figs.)).

GLASTONBURY.—**Excavations at Abbey.**—In *Ant. J.* x, 1 (Jan. 1930), pp. 24-29 (fig.), are reported the results of recent excavations in Glastonbury Abbey. The remains of the church by Ine (King of Wessex 689-728) and its porticus, which seems to be Kentish, the reconstruction of this king's chancel, additions to his porticus as well as alterations in the porticus of St. David (died in 546), and almost the entire plan of the work of addition by St. Dunstan, abbot from 940 to 957, have been uncovered. Additional work will be done on this site.

SOMERSETSHIRE.—**Mediaeval Spoon.**—A beautiful silver spoon of very rare type about nine inches long and assigned to a date close to 1200 has been found at Taunton Castle, Somersetshire (*Ant. J.* x, 2 (Apr. 1930), pp. 156-158 (fig.)).

RENAISSANCE

ITALY

Paintings.—In *B. A. I. Chicago*, xxiv, 3 (Mar. 1930), pp. 29-31, DANIEL CATTON RICH reports that the Art Institute has acquired among nine important paintings six by members of the Italian School.

Paintings by Jacopo Bellini.—In *L'Arte*, xxxiii (1930), pp. 180-186 (3 pls.; fig.), L. VENTURI publishes a Madonna in the collection of J. I. Straus in New York and a portrait in the Metropolitan Museum which he attributes to Jacopo Bellini. The Madonna is similar to the two by Jacopo in the Academy at Venice and the Louvre, but it is more advanced, approaching the style of Giovanni Bellini. The portrait has been attributed to Piero della Francesca, Tura, and Cossa. But both its style and the circumstances connected with the fact that the subject is Borso d'Este prove that it is by Jacopo Bellini. A similar correction is made in regard to a portrait of a boy in the Dreyfus collection, Paris, which is likewise to be identified as the work of Jacopo.

The Master of Antonello da Messina.—In *L'Arte*, xxxiii (1930), pp. 291-292

(fig.), L. VENTURI attributes to Colantonio, the master of Antonello da Messina in Naples, a portrait of a man in the Cleveland Museum which has been ascribed to Domenico Ghirlandaio. The new attribution is made on the basis of stylistic similarity to two known works by Colantonio in Naples, a polyptych in S. Pietro and a St. James in the picture gallery. Colantonio shows the Flemish taste inherited by Antonello, but the latter added a finer sense of chiaroscuro.

A Portrait by Tura.—In *L'Arte*, xxxiii (1930), pp. 283-284 (fig.), A. VENTURI publishes a portrait of a man in the Matthiesen Gallery, Berlin, in which he sees the characteristics of Tura's style. This example is the more valuable since, in spite of the fact that a goodly number of portraits by Tura for the Estensi family alone are recorded, very little of his work in portraiture has survived to us.

Portrait by Raphael.—A newly identified, and very excellent work by Raphael has been acquired by the Art Institute (*B. A. I. Chicago*, xxiv, 5 (May 1930), pp. 57-59 (fig.)). It is the portrait of a man and is assigned to about 1509, shortly after the great artist had moved to Rome.

Paolo Veronese.—In *L'Arte*, xxxiii (1930), pp. 292-299 (5 figs.), L. VENTURI publishes a painting of Christ and the Centurion in the collection of Arthur Sulley, London, which he attributes to Paolo Veronese. This painting differs from Veronese's picture of the same subject painted about 1560 very little in composition but a good deal in style. It must have been done considerably later, between 1570 and 1580, and shows less interest in striking contrasts but a more harmonious blending of color and light and shade. The work is to be attributed entirely to the hand of Veronese; there is not in it as in the replicas in the galleries of Dresden and Vienna, evidence of the mannerism of pupils.

ANCONA.—**A Majolica Relief.**—In *Faenza*, xviii (1930), pp. 14-16 (pl.; fig.), L. SERRA publishes a majolica relief of the Deposition, in the cathedral at Ancona, which he is able to date in the second half of the fifteenth century. But, though the work shows some relationship to the art of Niccolò dell' Arca and Guido Mazzoni, no definite attribution of provenance or artist can be made.

FLORENCE.—**A Predella by Masaccio (?)**.—In *Zeit. Bild.* K. lxiii (1930), pp. 125-127 (2 figs.), W. STECHOW publishes a predella in the Casa Horne at Florence which shows that the Masolino-Masaccio problem is more complicated than has been suspected, though this object does not actually solve any part of the problem. The predella represents scenes from the legend of St. Julian and is in some respects a more eligible candidate for the altarpiece which Vasari describes as the work of Masaccio in S. Maria Maggiore than are the panels in Florence and Montauban that Schmarsow, Berenson, and others have connected with that altarpiece. Discrepancy of measurements which those critics had overlooked made their conclusions unlikely.

ROME.—**A Painting by Bianchi Ferrari.**—In *L'Arte*, xxxiii (1930), pp. 41-45 (pl.), A. VENTURI publishes a fine Crucifixion in the collection of the Baron Alberto Fassini in Rome, which has formerly been attributed to Mantegna. There are Mantegnesque characteristics in the composition, especially in the background scenes. But the style of the work in general classifies the panel as the work of Francesco Bianchi Ferrari, master of Correggio. It is beautifully done, with a miniaturist's fondness for fine, jewel-like details.

TURIN.—**Paintings by Spanzotti.**—In *L'Arte*, xxxiv (1930), pp. 16-29 (4 pls.), G. PACCHIONI writes of four hitherto unpublished paintings in the R. Pinacoteca at Turin by the Piedmontese artist of the early sixteenth century Giovanni Martino Spanzotti. They are a triptych of the Madonna between two saints, and two panels of the Adoration of the Magi.

HUNGARY

Florentine Artists in Hungary.—In *Archaéologiai Értesítő*, xliii, pp. 273-280, JÓLÁN BALOGH adds more names to the list of Florentine artists who worked in or for Hungary. After the battle of Mohacs the artistic relationships between Hungary and Florence were confined to the work in Hungary by engineers from Italy and the use of Hungarian themes in Florence, especially for festivals connected with the Hapsburgs.

ROUMANIA

JASL—Ikon.—An ikon of the Madonna and Child with a silver frame and a Greek inscription from the year 1589 has been acquired by the Museum of Antiquities. The image resembles that in the Cathedral of Vladimir in Moscow and also one at the Monastery of Chilandar on Mount Athos. The frame is elaborately decorated.

SPAIN

An Embroidered Spanish Retable.—In *Archivo Esp. de Arte y Arqueología*, xiii (1929), pp. 1-20 (8 pls.), J. CABRÉ Y AGUILÓ publishes an embroidered retable of quite elaborate composition which has recently come into the collection of the Art Institute of Chicago, ultimately from the Cathedral of Burgo de Osma. The work was done for Bishop Don Pedro de Montoya, and is to be dated between 1458 and 1468. Whether the artist was a Fleming or a Spaniard under Flemish and Italian influence has not been definitely decided.

THE NETHERLANDS

Engravings by the Master W A.—In *B. Mus. F. A.* xxviii (Feb. 1930), pp. 1-3 (2 figs.), H. P. R. reports on two excellent engravings recently added to the Boston Museum of Fine Arts, a Madonna and Child and a One-Masted Ship, whose author flourished in the third quarter of the fifteenth century. The artist was one of the earlier workers in this new medium. The Madonna and Child is one of his masterpieces. The One-Masted Ship is portrayed with considerable fidelity to details.

A Landscape by Vermeer.—In *Zeit. Bild. K.* lxiii (1930), pp. 237-239 (2 figs.), C. LINFERT publishes a fine landscape by Vermeer of Delft which has recently come into the collection of the Wallraf-Richartz Museum in Cologne. A study of the painting is made in its relationship to the landscape of other artists of the time, particularly as seen in the paintings of Kopinck and Ruisdael.

GREAT BRITAIN

LONDON.—Exposition of Italian Art.—The exposition in London has vindicated again the claims of Italian art to universal and constant appeal. The interest shown in the exposition has been great, with over 500,000 attendants and a sale of over 150,000 catalogues. But L. VENTURI (*L'Arte*, xxxiv (1930), pp. 300-303) criticizes the choice of the exhibits, feeling that the thirteenth and fourteenth centuries were by no means adequately represented in proportion to the later centuries.

SUSSEX—Sixteenth-Century Door.—In *Bull. Ont. Mus.* 9 (Jan. 1930), pp. 11-13 (fig.), THOMAS SUTTON reports on the acquisition by the Royal Ontario Museum of a beautiful oak door from Sussex, the centre of a famous wood and iron industry for long ages.

FAR EASTERN

CHINA

Bronze Jar of Early Han Period.—In *B. Mus. F. A.* xxviii (June, 1930), pp. 45–47 (3 figs.), KOJIRO TOMITA describes a bronze jar acquired by the Boston Museum of Fine Arts. The body is ovoidal, the mouth square, and the foot circular. The decoration is rich in figures of animals and drivers. One series of creatures possibly represents a remote world inhabited by wild monsters, the other a region subjected to the influence of an enlightened ruler.

Han Foot-Rule.—In *B. Mus. F. A.* xxviii (Feb. 1930), pp. 8–9 (fig.), F. S. K. describes a foot-rule of the year 81 A.D. that has become the property of the Boston Museum of Fine Arts. The basic substance is lead, which is richly ornamented with gold inlay.

Silver Box and Bowl from T'ang Dynasty.—In *B. Mus. F. A.* xxviii (Feb. 1930), pp. 32–33 (2 figs.), K. T. announces that the Boston Museum of Fine Arts has acquired two beautiful silver pieces, a box probably intended to hold rouge and a bowl used in serving food. The workmanship shows a high order of skill.

Statues of the T'ang Dynasty.—CHARLES FABENS KELLEY reports (*B. A. I. Chicago*, xxiv, 5 (May, 1930), pp. 60–63 (3 figs.)) the acquisition by the Art Institute of a triad of stone statues belonging to the T'ang Dynasty.

ORDOS.—Bronzes.—In *Ant. J.* x, 1 (Jan. 1930), pp. 1–23 (4 pls.; 2 figs.), ELLIS H. MINNS writes about a collection of two dozen small bronzes acquired by the British Museum in 1929, which had been assigned roughly to South Russia, but eighteen of which Mr. Minns now traces back to Ordos, the steppe region between the Great Wall and the curve in the Yellow River. The report on these objects gives an interesting survey of the remains derived from this region and Scythic archaeology during the last generation. There seems to have been an encroachment upon China by a people coming from the region to the northwest, the Huns probably, a movement dated in the last three centuries B.C. The Chinese are believed to have then manufactured objects that appealed to the taste of this foreign stock. The pieces under discussion are principally such as apparently were fastened upon other articles for purposes of decoration, figures of animals or parts thereof. The Scythic art observable in these objects confirms the writer in his earlier view that Turkish elements can be detected in the Scyths. The few pieces in the collection which may not be very plausibly assigned to North China possibly are from South Russia, although some seem to be derived more probably from the borders of Armenia and Iran. They are believed to date to the beginning of the last millennium before Christ.

JAPAN

Printed Japanese Scroll.—In *B. A. I. Chicago*, xxiv, 4 (Apr. 1930), pp. 44–46 (2 figs.), HELEN C. GUNSAULUS announces that the Art Institute has acquired an important Japanese painting by Hishikawa Moronobu, which was made late in the seventeenth century.

CENTRAL AMERICA

BRITISH HONDURAS.—Maya Remains.—In *The Illustrated London News*, Mar. 8, 1930, p. 383 (10 figs.) are shown several objects recently found near the Mojo River in British Honduras. Much pottery, stelae, and a mirror, the face of which consists of polished iron pyrites on a slate backing, are included among the finds. These objects shed fresh light on the Maya civilization from the first to the third century A.D.

SOUTH AMERICA

PERU.—In *The Illustrated London News*, Feb. 15, 1930, pp. 248–249, 276 (10 figs.), A. HYATT VERRILL writes about important discoveries at Parakas, in the so-called Nasca area of Peru, by Dr. Juliano Tello, Director of the Lima Museum of Archaeology. The culture of the Nasca, which is two to three thousand years old, had previously been known from elegant burial fittings of elaborate cloth, feathers, and other ornaments, but now Dr. Tello has discovered considerable remains of a civilization antedating even the pre-Nascan. Pyramidal shaped mummy bundles, some of them six feet high and as many in width, consisted of richly colored wrappings and contained well modelled pottery painted in green, red, blue, and yellow. The cloth used for the outer wrappings was of cotton, that of the inner layers of wool, much of which is richly colored. The mummy itself sat in a basket. The body was carefully prepared through the removal of the viscera, the cutting out of the large muscles, and the severing of the tendons at the joints. The corpse was apparently immersed in a nitrate or saline solution, after which it was dried and smoked. The craftsmanship shown in the embroidery is of a very high order. This culture may extend as far back as 11,000 B.C. From the fact that all the mummies thus far discovered are those of chieftains, it has been inferred that the bodies of a vast population of common folk still remain to be located. Anthropologically the skeletons are very interesting. They measure over six feet in height and show large brain capacity. South American culture may extend much farther into the past than had usually been believed.

NEWS ITEMS FROM ROME

The latest report in this series was prepared in June, 1929, and published in *A.J.A.* xxxiii (1929), pp. 432–443. The year that has intervened has been marked by the general interest in Roman and Italic antiquities which has been aroused by the approaching bimillenary of Vergil's birth: this is being celebrated in the year 1930, although a precise calculation gives October 15, 1931, as the date (J. K. Fotheringham, in *The Classical Review*, February, 1930). The Italian state has participated by means of a medallion, modelled by Giuseppe Romagnoli and struck by the Royal Mint, in which the medallist has drawn his inspiration in part from the well-known mosaic in Roman Africa; and through the issue of an artistic series of postage stamps in ten denominations; each denomination bears the motto, ANTIQUAM EXQUIRIRITE MATREM; the lines in which the poet praises the land and its fruits, and commends the labors of the husbandman, are readily applicable to the conditions of the present day, and, on the 30-centesimi stamp, find their apt illustration in motives from the Augustan Altar of Peace. In forty cities of Italy, chosen orators have already pronounced eulogies of the poet; during fifteen days in September there will be the official Italian cruise to Brindisi, Taranto, Butrhotum in Epirus, Catania, Syracuse, Agrigento, Trapani, Salerno (with Paestum), Naples, Civitavecchia (with Lavinium and Ardea). On October 15 there will be the solemn commemoration in Rome, Naples, and Mantova. In this connection, excavating activity is being directed toward Vergilian sites, especially Ardea and the citadel of Cumae; the monument in Naples, near the ancient tunnel of Posillipo, which is traditionally known as Vergil's tomb, has been rescued from the neglect which had threatened it; and at various significant points in the Phlegraean Fields marble tablets are being erected bearing the verses from the *Aeneid* in which these spots are immortalized: in this land there are no sharply drawn lines of distinction between archaeology, poetry, and life.

A cordial welcome is to be accorded to a new institution for which a career of great usefulness seems assured: the Associazione Internazionale degli Studi Mediiterranei, which is well installed in the Villa Celimontana in Rome, has already begun the publication of a bulletin, and in other practical ways is encouraging research in the wide field to which it is devoted. It has announced two international competitions, one for a study of the road system of the Roman Empire, and another the compilation of a *Prosopographia Liberae Romanae Reipublicae*. Participants were to submit their notifications not later than September 30 and July 30, 1930, for the respective competitions; December 31, 1934, has been set as the date for completing the work. The steady development of the Reale Istituto di Archeologia e Storia dell' Arte, with its well-equipped library in the Palazzo di Venezia and its admirable programme of publications, the progress of the new Istituto di Studi Romani, and also the vigorous archaeological activities of the administration of the city of Rome, deserve special mention. The approaching completion of the dignified building at the Valle Giulia that is to house the Roumanian Institute emphasizes the position of Rome as an international center of cultural activities.

In April, there was held in Rome the second National Congress of Roman Studies. It was possible to report that during the year which had elapsed since the first of these congresses the following of its aims had been accomplished: the worthy installation of the Museum of the Roman Empire; the foundation of the national association for the excavation of Aquileia; the formulation of a scheme for a *corpus* of the fragments of Roman architecture that are scattered through all parts of the Empire; and the excavation of prehistoric tombs on the Esquiline. Professor Bartoccini showed splendid slides of the sculptured decorations of the arch of Septimius Severus at Lepcis Magna, this being the first opportunity to behold the various scenes as they have been reconstructed. The Ingegnere Mengarelli spoke of the history and the inscriptions of Caere. Commendatore Giovenale and Signor Cozzo discussed the functioning of the awnings at the Roman spectacles, and Commendatore Marucchi the shrine of the Greek martyrs, which he believes he has discovered beneath the Trappist monastery on the Via Appia. Dr. Spano treated of the triumphal arches on the Gulf of Puteoli commemorating the naval victories of Agrippa and Octavian; and the Ingegnere Iacono, who is well known for his competence in the field of the technical appliances of the ancients, enumerated many devices, including the surveyor's table, the water-mill, the olive-press, and various surgical instruments, with special reference to the examples in the Naples Museum; this lecture was enthusiastically received, the congress expressing its desire that there should be founded in Naples a museum of ancient technology, which would be unique among the institutions of the world. The assembly also passed a vote recommending the enlargement of the Museo Nazionale Romano at the Baths of Diocletian.

That vast undertaking, the demolition of the insignificant modern structures which have blocked the view of the Capitoline hill and of such historical monuments as the imperial fora and the Theatre of Marcellus, is nearing completion; so that ancient Rome is now being revealed to us as never before. The methods at present followed for preserving the ancient remains have earned the gratitude of all lovers of antiquity: they are seen at their best in the Forum of Augustus and at the Market of Trajan. The plans recently adopted for a system of underground railways in the city give promise of still further finds in the subsoil. The problem of the complete excavation and reconstruction of the Ara Pacis is still under consideration.

The project of a partial reconstruction of one of the most venerable edifices of the

city, the shrine of Vesta in the Roman Forum, has been studied for some time by a commission of experts, who as an experiment erected a temporary reconstruction in stucco of a segment of the shrine; their findings have now won official approval, and this portion has been permanently replaced in the original materials, the greatest care being shown in all details of the work: an interesting compromise between two schools of opinion in the matter of restoration. Funds for the purpose were generously donated by private individuals, in memory of Giacomo Boni, who for so many years devoted the best of his rare abilities to the investigation and interpretation of the Forum and Palatine. The elements in the order as reerected date from a rebuilding of the early third century A.D.

As a result of the recent years of excavation on a large scale not only in Rome but at Ostia and Herculaneum, certain facts have emerged as to the types of dwelling and the modes of town-planning in vogue in antiquity, and the time has come when generalizations can be made and there can be assigned to the individual remains their setting against a background of economic and social history. This was done by Dr. Axel Boethius, the director of the Swedish Institute in Rome, in an important lecture at the American Academy on the 21st of March. By combining the testimony of the authors, especially Tacitus and Suetonius, with the evidence of the remains, he succeeded in drawing a clear picture of the "Old Rome" that was wiped out by Nero's fire, and he showed the nature of the change in the character of the city which thus came about. Briefly, the type of residence represented by the traditional domus of Pompeii and by the precepts of Vitruvius was replaced by the insula, or tenement-house, now familiar to archaeologists from the splendid examples at Ostia; but at both Pompeii and Herculaneum, especially at the latter place, it is clear that the tendency to the later type was pronounced in the period between the severe earthquake of the year 63 A.D. and the eruption of 79.

More fragments of the record of the *ludi saeculares* of the time of Septimius Severus have been found in a mediaeval wall near the Tiber, not far from the *Ara Ditis Patris et Proserpinæ*.

The Roman museums, already a characteristic feature of this capital, have witnessed two additions to their number during the year under review. Of these, the Museo di Roma, installed in the same palace near the northwestern end of the Circus Maximus that serves for the Museo dell' Impero, is concerned primarily with post-classical Rome, but deserves mention here by reason of its testimony to the vicissitudes through which the ancient monuments have passed. The Museo Storico Retrospettivo del Fascio Littorio contains a collection of objects of all periods from the Roman Republic to the end of the nineteenth century that bear the symbol of the fasces, with its lesson of the respect for law and order which Rome inculcated; this is the gift of its collector, the Count A. Contini-Bonacossi, to the head of the government, and by him has been entrusted to the care of the Fascist Party.

Meanwhile the rearrangement of the museums on the Capitoline, of which mention was made in *A.J.A.* xxxiii (1929), p. 436, has been brought to a successful conclusion with the transfer of the few works of ancient art remaining in the gallery of Hercules to other halls of the Palazzo dei Conservatori, together with some slight modifications in arrangement that were rendered necessary or advisable in view of fresh acquisitions from excavations. Thus the small bronzes of the gallery of Hercules (Lars, Hecate, Julio-Claudian portrait, etc.) have been put in a case in the hall of the bronzes; the small enamel head and the marble statuettes (torso of the Hercules of Polyclitus, bust of Greek poet, etc.) are exhibited in a wall-case in the second hall of the Museo Mussolini; in the same hall there have also been placed a remarkable sarcophagus of the second century A.D. representing Tritons and Ne-

reids and a male bust apparently of the time of Hadrian, both of which were discovered in 1928 near the Campo Verano. The space that had been occupied by the pedimental terra-cotta sculptures from San Gregorio on the Caelian (now transferred to the passage which leads to the Portico of Vignola) serves for the effective display of a noteworthy product of Roman art, a large strigillated sarcophagus which was found at the Piazzale del Verano in 1928 and bears on its front a representation of Hercules returning from Hades followed by Cerberus. The center of the Hellenistic hall (IV) is adorned by the marble figure of a Muse, probably Polyhymnia, discovered in the Via Terni in 1928; and in the second hall of the *fasti moderni* there now stands an admirably preserved sarcophagus of excellent workmanship belonging to the Antonine period and representing a Dionysiac procession.

In the Capitoline Museum itself, the rearrangement of the two portrait halls (Emperors and Philosophers) is now completed, resulting in greater homogeneity and heightened aesthetic effectiveness. The material thus eliminated has lent itself to the formation, in the first room to the right on the ground floor, of a small but interesting chronological series of portraits. Another instructive grouping is now to be seen in the first room to the left on the ground floor, where are assembled all the marbles having reference to the Oriental cults which were formerly exhibited in the Palazzo dei Conservatori, either in the Galleria delle Statue or along the stairs leading to the picture gallery. To these have been added two fragmentary Mithraic groups from the Antiquarium on the Caelian and a relief, formerly in the Biblioteca Vallicelliana, representing a priest of Bellona. The next room has been assigned to several Roman copies which have been removed from various halls in connection with this rearrangement, and also a large reclining male torso found at the Via Iside in 1927. The cumulative result of all these changes, for which gratitude is due to the Director of the Capitoline Museums, Commendatore Settimio Bocconi, has been that it is now possible to study Greek and Roman art on the Capitoline Hill to distinctly better advantage than before.

At Ostia, the campaign of excavation now in progress has not reached the stage when discussion in these pages would be profitable; the present occasion is suitable, however, for a general survey of what has been accomplished at this important site, the port of Rome, during the fifteen or more years of almost continuous activity on the part of Professors Vagliari, Paribeni, and Calza; the last-mentioned scholar, whose name is familiar to all who are in touch with recent archaeological events, has been so kind as to furnish his own *résumé* of his criteria and methods, and of the results achieved, which constitute a noteworthy contribution to the study of the Roman world.

Abandoning the former method of investigating single groups of edifices to the neglect of less important ruins, the work at Ostia has been directed to the search for: (1) the street-plan, the monuments and the buildings of the imperial city; (2) the extension of the city during the earlier period, and the republican monuments; (3) the origins of Ostia in their relation to the traditions.

The excavation of the imperial city has been extended from the theatre as far as the seaward side of the Forum, has included some ten hectares of ground, and has resulted in a precise knowledge of the town-plan of ancient Ostia between the decumanus and the Tiber. There have been uncovered about forty streets, parallel and perpendicular to the decumanus and the cardo, clearly a preconceived network. The square of the commercial corporations is also known, with about seventy offices installed in the colonnade which encloses the large open space. Huge warehouses with some one hundred rooms for storing grain, constructed at the beginning of the first century of the empire and enlarged or modified in the

third century, occupy a large city block between the four republican temples and the well known flour mills.

The number of private houses known at Ostia has likewise been increased, and, as indicated above, it is now possible to study the Roman house in its relation to the problems of sociology and economics as well as in its many architectural aspects. The Ostia house has now acquired the same degree of importance as the Pompeian house for the private life of the ancients, and as regards its architecture it may well be esteemed still more important, since it gives us the origin of many Byzantine and Romanesque motives and shows the essentially Latin character of the most frequent type of modern house.

As regards the monumental aspect of Ostia, which is being revealed more and more as that of a rich and splendid city, essentially free from foreign influence, the recent discoveries have yielded the Forum, which in addition to the well-known Capitolium exhibits the conspicuous remains of a basilica and a temple of Rome and Augustus. From the basilica there survive a number of marble fragments of a beautiful frieze of the time of Hadrian, with Cupids and festoons, which formed part of the decoration of the arcade facing the Forum. The temple of Rome and Augustus is represented by the masonry vaults, of the Claudian period, and almost the whole of the rear pediment, including capitals, architrave, and horizontal and raking cornice, which have now been erected near the ruins of the foundation, together with two statues that once adorned the edifice, a winged Victory and a figure of Roma. The temple was Corinthian, hexastyle, of Luna marble. The baths to the east of this temple, described in *A.J.A.* xxxiii, 436 f., add to the monumental character of the city.

At the same time, special study has been devoted to the city of the republican period, the extent of which had not been known; and an attempt has been made to throw the light of archaeology on the obscure question of the origins of Ostia. By means of some two hundred test digs it has proved possible to trace all the extent of wall of the Sullan period, consisting of five sides meeting in obtuse angles, with a perimeter of 5,500 feet. The structure is of pseudo-reticulate, with tufa quoins on the eastern, southern and western sides, and tufa parallelopipeds in use on the north. The ground level, type of construction, and historical motivation, combine to suggest a Sullan date for these walls, which were already neglected and dismantled in the first century of the empire. The presence of an impressive corner tower to the northeast, constructed in ashlar with bossed blocks of tufa, and the finding of tufa blocks to its west for a distance of about 100 feet parallel to the Tiber, make it probable that the line of defence extended along the river-bank. Several gates have been identified: one at the eastern end of the decumanus, the Porta Romana (these names are conventional); the Porta Laurentina, at the end of the cardo; the Porta Marina, at the sea end of the decumanus; the destruction, as it appears, due to natural agencies, of the final 900 feet of wall at the northern end of the western side, renders it impossible to determine the details of wall and gates in this part. All the gates just enumerated are contemporary with the construction of the walls themselves; the Porta Laurentina, measuring 23 x 13 feet, with tufa piers, flanked on the inside by two towers of more solid construction than the projecting towers of the wall itself, has the same characteristics as the Porta Romana; the Porta Marina, which was similar, was abolished in the third century of the empire, when the city had been enlarged on the sea side and the decumanus was being extended toward the shore. Thus there has been demonstrated the existence of a city of the Sullan period extending over some seventy hectares of ground, almost as large as the city of imperial times. It already possessed the street-plan characteristic of Ostia under the empire; in addition to the substantial tombs

which lined the highway towards Rome, it was adorned with various monumental structures, a great altar facing the (later) theatre, the characteristic group of four small temples on one podium, a small temple at the corner of the Via dei Molini and the decumanus, another of which the foundations are preserved beneath the sacred precinct of the Capitolium, and two houses of the atrium type near the Forum.

Another important discovery has been that of the raising of the level of the city at the beginning of the empire: the streets were reconstructed, and private houses and public monuments rebuilt. The reason for these measures is to be found in the neighborhood of the Tiber and the failure of the elaborate drainage system of the Sullan engineers to meet the needs of the later city.

As to the vexed question of the origins of Ostia, which has been treated in recent years by such eminent scholars as Carcopino, De Sanctis, and Pais, the theories based on scanty literary texts can now be replaced by positive archaeological data. At the old mouth of the Tiber, precisely where the authors locate the foundation of Ostia, there arose at the close of the fourth century B.C. a strongly fortified citadel. And since this city corresponds fully to the military purposes for which it was created, there is no reason to think that it was preceded by another more ancient colony. The function assumed by Ostia, as testified by the Roman writers and as indicated by the logic of historical circumstances, begins only with the establishment of this first Roman colony. Its date is given by the sure evidence of the walls, a rectangle occupying the centre of the later city; they are in every respect similar to the second enclosure of the Palatine, whether in material or in technique; the level of this early city is that of the virgin sand, in which there has been found no trace of earlier habitation; and a dating at about 330 B.C. is confirmed by the fictile objects found in this connection, "Etrusco-Campanian" products coming from the refuse or the destruction of a temple. This early citadel measures 630 x 390 feet, and long stretches of its walls are preserved; portions of these were utilized in constructions of the imperial age, when they were always visible; the two gates on the decumanus were respected until it was necessary to raise the level of the city, and now they have been uncovered again. The existence of this military colony can never have been forgotten in antiquity.

The condition in which these ruins were uncovered has brought Dr. Calza and his capable staff face to face with very practical questions of restoration and maintenance, and has led them at the same time to consider the theory underlying the practice which they have adopted with such admirable results. All who are interested in these matters, which are of steadily increasing importance to all excavating and administrating archaeologists, and to historical students, as well, should consult Dr. Calza's fully illustrated article in the *Bollettino d'Arte* for January, 1930, and also his discussion in the number of the same review for November, 1929. He emphasizes the divergence of method between, e.g., the British restorations at Cnossus, the French at Timgad on the one hand and at Djemila on the other, and the Greek on the Parthenon, and calls our attention to a distinctly Italian mode of procedure which has been developed at Pompeii, Herculaneum, Rome, Lepcis Magna and Ostia; he distinguishes between the completion, consolidation, recombination, and liberation of the monuments; and he draws his illustrations from the Horrea Epagathiana, the baths near the Forum, some shops on the Via di Diana and the Via della Fortuna, the Basilica, and the temple of Rome and Augustus. The restoration of the theatre to its original function as an auditorium has evoked considerations of a somewhat different character but no less general interest.

The readers of these pages are already familiar with the operations for partly

draining the Lake of Nemi and recovering the ancient ships embedded in its bottom. One of these ships has now been completely recovered, with results of the greatest value for the nautical technique of the ancients, and for certain aspects of the arts and crafts. An anchor has been found, eleven feet long, of bronze, with its vertical shaft sheathed in wood, together with portions of the rope hawser. The second ship has been inspected by divers, and some objects, especially a bronze double herm, have been recovered from it. It is reported that the latest date represented by coins from these ships is of the principate of Caligula, lending credence to the idea that at the end of that reign the imperial houseboats were systematically stripped of their movable fittings and then sunk. A museum is to be established near the edge of the lake, to contain the rescued ship and the objects that have been found in it.

Tivoli has yielded a remarkable discovery: the well-preserved tomb of a Vestal Virgin, Cossinia by name, near the right bank of the Anio.

We now follow the regions of Italy from north to south, beginning with the important site of Aosta, ancient Augusta Praetoria, near the northwestern frontier. Here has been inaugurated a museum illustrating the pre-Roman and Roman antiquities of the vicinity and of Aosta itself; it has been installed in an old ecclesiastical building near the well-known Church of Sant'Orso, outside the Roman walls but not far from the Arch of Augustus. It contains the anthropological and sepulchral material from the government excavations at the Neolithic cemetery of Villanova Baltea; characteristic objects of the Bronze and Early Iron Ages; more than thirty Roman inscriptions; a sectile pavement; among the objects from the Roman post-stations at the summit of the Little St. Bernard, a bust of the local Jupiter, fashioned from a sheet of silver; also an instructive ceramic collection and numerous architectural fragments demonstrating the prosperity of Augusta Praetoria.

Impressive testimony to the administrative and engineering activities of the early empire is furnished by the remains of the Via Iulia Augusta, near the coast to the west of Genoa, and especially in the stretch between Cadibona and Albinga. Some of the bridges are admirably preserved and of considerable technical interest, especially those in the Val Ponci, near Finale Marina. The government experts, after examining these remains, have concluded that all the bridges which are still in use for mule-tracks and mountain carts have need of strengthening as soon as possible, and they have already proceeded to ensure the stability of the third bridge in Val Ponci, spanning the stream Voze; the measures adopted consisted in supporting the base of each side of the arch with three massive piers fastened by means of iron rods to the Roman substructure behind, and laying a bed of concrete, covered with a stratum of gravel, in the watercourse between the two sides of the bridge, to prevent the torrent from hollowing out its channel still more deeply. Further to the west, at Ventimiglia, there has been recently uncovered a stretch of Roman road; this will be removed from its present location, which is preempted for a railway, and it will be reassembled in the garden of the Museo Bicknell at Bordighera—perhaps the first instance in which a Roman road has been treated as a museum specimen; it is to be hoped that the initiative thus coming from this remote corner of Italy may be widely followed in circumstances where the exigencies of modern life compel the removal of ancient structures from their original positions.

The condition of one of the most famous bridges of Etruria, the Ponte della Badia which spans the Fiora at a height of almost 100 feet near Vulci, has long given cause for anxiety, and has recently formed the subject of an investigation. It is welcome news that a public-spirited man of affairs has undertaken to repair

this structure and to provide for its adequate protection at his own expense: the list of such enlightened actions on behalf of the cultural patrimony of Italy is already a lengthy one.

The town of Sarsina in northern Umbria has hitherto been known to fame chiefly as the birthplace of Plautus. It now is destined to occupy a prominent position on the archaeological map of Italy, owing to extensive hydro-electric undertakings which have led to the discovery of its necropolis. The excavations, which are being conducted by Dr. Aurigemma, are to be continued for several years to come, and will include the town itself. It appears that both town and necropolis were buried deep in mud owing to a landslide in the imperial period. As to the portion of the cemetery recently discovered, it is stated that "it dates from Roman Republican and early Imperial times, and consists of two rows of tombs running on both sides of a suburban road. Most of them are of an unparalleled monumental grandeur, rivalling in majesty and richness of decoration the great mausoleums of the Appian Way in Rome and the well-known examples on the coast of Roman Africa. Several tombs at Sarsina reached a height of 30 feet and more. Others, in the shape of small temples or shrines, were adorned with columns and statues, and many bear inscriptions revealing the names of men and women of the best families in the town. Several marble heads are among the most characteristic portraits of the Republican period, and show the strong, hard, and expressive type peculiar to the Italian provincial stock" (Halbherr, in *The Illustrated London News*, April 12, 1930).

One of the last of the great museums of Italy to be worthily housed is the collection which all archaeologists who have visited Ancona in recent years have appreciated as of prime importance for the prehistory and early history of the Adriatic coast, as well as the local art of later periods. The restoration of the former monastery of S. Francesco delle Scale, a noteworthy structure of the Romanesque and Gothic period with modifications in Venetian Gothic, supplied the obvious monumental edifice to contain both the archaeological and artistic collections of the state and the city's picture gallery. The archaeological section is installed in seventeen halls, and embraces Roman, Graeco-Roman, Etrusco-Picene, Picene, and prehistoric antiquities, together with a rich numismatic collection, containing over fifty thousand pieces. The special feature of this museum is the tomb-series from the various pre-Roman areas of culture in this part of Italy; the Stone and Bronze Ages are as well represented as the Picene and other later cultures. The Director, Dr. Giuseppe Moretti, has earned the gratitude of the devotees of more than one field of research.

The Ancona Museum has also benefited recently by the discovery, at Saltara, of a Roman mosaic floor in black and white, consisting of a fantastic central figure badly damaged and several rectangular compartments each of which contained one or two running figures of animals in wooded landscapes. Three of these panels, though damaged, were sufficiently intact to be transferred to the museum: one shows a panther, another a hare, and the third, which is longer, a wolf pursuing a wild goat in full flight but turning to gaze at its pursuer.

Much light is expected to be thrown on the late classical and early Christian period of Naples by the elaborate official undertakings now in progress at the catacombs and basilica of San Gennaro extramoenia. Already the following conclusions have been established: (1) the present large church, erected near the entrance to the catacombs, is in its essential and original structure an early Christian edifice of great importance; (2) facing it, and at a slightly lower level, there can be identified a portion of the back wall and the apse arch of another early church; (3) the present level of the so-called lower catacomb is, for a certain distance, higher than

it originally was; (4) there are in existence several galleries in a still lower story; (5) the section on the extreme right, starting immediately behind the apse of the church of San Gennaro, and still half buried, possesses exceptional importance for both art and history. The primitive church, as it is now being revealed through the removal of late accretions, consisted of a single nave, 130 x 40 feet in size, with three doors in the front wall; the pavement sloped decidedly upwards toward the triumphal arch, which was supported and flanked by columns; the apse itself was pierced by arches leading to the cemetery, where the remains of saints and martyrs were deposited. The area of the catacombs had already been occupied by at least one pagan columbarium: these soft tufa hills of Naples lend themselves readily to such usages.

Attention was called in *A.J.A.* xxxiii (1929), 438 f., to the perfected methods of excavation and restoration which characterize the Italian government's operations at Herculaneum under the direction of Dr. Amedeo Maiuri, and the exceptionally interesting results already attained. The past year has been one of steady progress, and the present method of retaining in each house the small objects found there is increasingly justified by the well-rounded picture of ancient life thus presented. We must not be impatient in looking for sensational finds, though these too will probably come; it is in its cumulative effect, rather than in individual details, that a vast excavation of this sort may be expected to make its most distinctive contribution to scientific knowledge. The excellent new motor road from Naples to Herculaneum, Pompeii, and beyond will bring the visitor to his goal with the minimum of fatigue, and the dignified new entrance will induce a suitable frame of mind for appreciating the peculiar charm of this corner of the Roman world. During the three years since the inception of these excavations, there has been completed the clearing of a section extending downhill along an important street from the corner of a large bath establishment to the ancient shore line, near which has been found an inn. At present the vaulted drain of this area is being relieved of the mud with which it had been choked, and it will soon be restored to its original function. At the same time, the skilful restorers are putting the finishing touches to their work, so essential to the proper preservation and exhibition of these remains, and in particular are directing their attention to a sumptuous house with atrium and peristyle, which with its mosaics, marbles, and paintings presents an admirable picture of the refined luxury enjoyed by the wealthy families of the peaceful and prosperous first century of the empire. The programme for the immediate future includes the complete liberation of the baths which mark the northern boundary of the area at present uncovered; valuable finds are expected at this point, where it is believed that the tunneling operations of the Bourbon period did not penetrate. In preparation for this new phase of the great undertaking, more than twenty houses of the modern town of Resina are being demolished, and negotiations are in progress for the expropriation of at least as many more. It is planned eventually, that is in the course of years, to extend the excavations uphill until they form one uninterrupted area with the famous theatre, which was excavated by tunneling in the eighteenth century.

Progress at Pompeii has been equally remarkable; the official account of the investigation of the town walls is understood to be forthcoming; it is not the time as yet to discuss the recent extension of the excavated area at the Villa of the Mysteries; the latest number of the *Notizie degli Scavi* is largely devoted to some houses, with features of special interest, on or near the Strada dell' Abbondanza; here the epigraphist in particular will find reason for gratitude to the care and skill of the official staff, and the Vergilian year has proved a peculiarly appropriate occasion for publishing a Vergilian echo among the graffiti (*Aen.* ix, 269, in *Not. Scav.* 1929, 465).

Few of the scattered Roman remains of Italy have appealed more directly to travellers than the two huge marble columns, one of them preserved to its full height, that overlook the inner harbor of Brindisi and seem to give the Roman salute to the ships that come and go. The proper systematizing of the surrounding square and the steps leading up to it from the water-front has been the object of official deliberation; it has been decided to reconstruct the steps with a greater width and without the intermediate landing, and to retain the present dimensions of the square about the columns, but to provide for the replacing of the present houses with more dignified edifices, allowing for such modifications as will render the columns fully visible from the harbor.

A welcome item of news from Sicily is the interest which is being taken by the government in the preservation of the harbors of Syracuse and the protection of this historic panorama from the inharmonious intrusions that were threatened as a result of the remarkable recent growth of the city and the increase in its overseas commerce. The thoughts of all were turned toward Syracuse in early May, when the picturesque Greek theatre was once more the scene of classic drama: the *Agamemnon* and the *Iphigenia at Aulis* were presented in the Italian translations of Marchionni and Garavani, under the auspices of the Istituto Nazionale del Dramma. For this occasion the roads leading to the theatre were improved.

At Taormina, steps are being taken to rescue from neglect a remarkable structure, second in interest only to the Graeco-Roman theatre, namely the so-called Naumachia, which in reality appears to be a huge reservoir, constructed in brick in the Hellenistic period, the decorated front of which served as a nymphaeum or public fountain. It is hoped to expropriate the space extending between the façade and the street, and to protect the structure itself from further damage; the clearing and systematizing of the monument, which it is hoped will be carried into effect in the near future, should yield further information as to its characteristics.

The impressive series of Greek temples that line the seaward wall of Agrigentum continue to occupy a prominent place in archaeological news. It has been decided to protect the "Temple of Concord" by means of a roof consisting of a wooden frame following the ancient traditions, and a tiling as far as possible of ancient flat and cover tiles, and to block the openings that were made in post-classical times in the cella walls. Dr. Marconi has continued the important excavation of the group of archaic altars near the "Temple of the Dioscuri." The most northern peribolos or temenos, overlooking the steep side of the Colimbretra, has been completely explored, and was found to consist, in its greatest dimension, of three parts separated by walls of regular blocks. The western division contains the large round altar that was uncovered last year; the middle one was discovered later; while the easternmost had in its centre a rectangular altar on a finely moulded base; its top surface was entirely ruined, since it was level with the surface of the tilled ground. A system of gates and passageways rendered the three divisions independent one of another, each of them being entered from the east. Before the eastern wall of this enclosure, there has come to light another rectangular altar, rather low, about six feet wide. The exploration has likewise been continued of the other peribolos and of the group of altars discovered in 1927. In this way there was found a small temple *in antis*, extremely archaic, orientated from north to south, with its door facing north, consisting of a shallow pronaos, a cella, and behind this an adyton with independent entrance to the east—a striking parallel to the plan of the fifth-century temple at Bassae. The ground was extremely rich in terra-cotta fragments of the prehistoric and Greek periods, the latter including lamps, miniature vases, statuettes, and masks of female divinities. Near

the Hôtel des Temples there have been explored two Greek houses, one of which has two rooms divided by a partition running lengthwise.

The excavation of the "Temple of Hephaestus" was completed; the western side, which was still covered with earth, was liberated. Thus the plan of this edifice was made entirely clear, and at the same time there was carried to completion the investigation of the extremely important archaic shrine contained in the interior of the substructures of the later Doric temple. Especial significance is assumed by the fact that in constructing the foundations of the classical period measures were adopted for preserving the heaps of fragmentary material that had come from the demolition of the small structure *in antis*, which probably was anterior to the foundation of the Greek city. An admirable impression of the local art is given by the terra-cotta head of a goddess which Dr. Marconi has just published in the periodical *Dedalo* for April, 1930; the neighboring Selinus is worthily represented by the bronze Ephebe which forms the subject of the first instalment of the series, *Opere d' Arte*, recently initiated by the R. Instituto d' Archeologia e Storia d' Arte.

On the northern coast of Sicily, the excavation of the important temple at Himera has been carried further. The later buildings on the site have been removed, and it has been found that the exterior columns are preserved along the sides of the edifice to the height of one or two drums, while at the ends they have almost entirely disappeared. The walls of cella, pronaos and opisthodomos are standing to a height of from three to ten feet, but the columns between the *antae* have only the bottom drums in place. A special feature are the narrow flights of stairs in the interior of the massive piers that flank the cella door. The excavation of the steps along the two sides yielded some thirty details of the sima, together with the lions' head spouts. There are two types of lion, that on the northern side still somewhat archaic and rude, that to the south more evolved and intense in its plastic structure. The portions of the sima were found with their original polychromy intact; the lions' heads had the mane blue, the tongue and ears red, the other parts yellow. There were also found fragments of sculpture in the round, of at least one female figure and two male ones. The presence of many elements of the polychrome frieze decoration of a small building dating from the beginning of the sixth century B.C. makes it probable that the great Doric temple of the fifth century occupied the site of a small shrine without columns but with the usual frieze decoration; especially fine are some antefixes with heads of Medusae and Sileni.

The Museum of Rhodes received in March of the year 1929 a noteworthy addition, in the form of a marble statue of Aphrodite, somewhat over life-size, recovered from the bottom of the sea near the entrance of the western port of the ancient city. Allowing for the loss of both arms and the damage undergone by the surface, especially of the head and the back, through long submergence, this is one of the best examples which have survived of the simpler type of Aphrodite, with slender youthful figure, the lower part draped, and the attitude one of modest shrinking. It has been fully illustrated by the director of the museum, Dr. Giulio Iacobi, in the *Bollettino d' Arte* for March, 1930.

A. W. V. B.

NEWS ITEMS FROM ATHENS

With the death, in the last week of June, of Vasilios Leonardos, Greece has suffered another serious loss in the ranks of the older generation of her archaeologists. Like his late colleague, Kavvadias, Leonardos studied medicine at the University of Athens and, by a strange coincidence, while Kavvadias spent a large part of his life excavating the Sanctuary of Asklepios at Epidaurus, Mr. Leonardos devoted forty years of patient research to investigating the Sanctuary of

Amphiarao, another great healer. In addition to his excavations at the Amphiaraion near Oropos, Mr. Leonardos was known to scholars as the editor of the *'ΕΦΗΜΕΡΙΣ ΑΡΧΑΙΟΛΟΓΙΚΗ* and as Director of the Epigraphical Museum, from which post he retired only last year.

Although excavation has not yet been started in the Athenian Agora, interesting results have been obtained from digging in other parts of the ancient city. Under the direction of Professors Brueckner and Knackfuss, the German Institute continued their work in the Kerameikos, clearing anew the region where Kouranoudis and his associates had dug fifty years ago. With their more modern equipment and methods the Germans found several new tombs and monuments, the most important being a polyandron which through its inscription could at once be connected with one of the great crises of Athenian history. The tomb contained skeletons of eight or nine men who are identified as the two Lacedaemonian polemarchs, Chairon and Timbron, and Lakrates, a victor in the Olympic Games, together with several other Spartans who fell while aiding the aristocrats in the battle of 403 B.C., when Thrasybulous freed Athens from the Thirty Tyrants.

The new Academy of Athens, instituted a few years ago, has interested itself in the discovery and excavation of the ancient Academy. The money for the investigation has been provided by Mr. Aristophron, and the work is being carried out by a commission composed of the archaeological members of the Academy in collaboration with Mr. Kastriotis, Director of the National Museum. Combining the information derived from Pausanias, Livy and Cicero with the evidence gained from recent excavations in the vicinity—the finding of the Dipylon end of the avenue leading from the cemetery to the Academy, by the German excavators, and the recovery of traces of the Sanctuary of Kalliste which, according to Pausanias, adjoined the avenue—the commission were led to choose a spot six stades from the Dipylon on a line prolonged from the curbs found at the cemetery end which also passed the ruins of the Sanctuary of Kalliste. This site is to the south of the Church of St. George, at the corner of the streets Palamidi and Monastiriou. By great good fortune the workmen immediately struck an ancient road, relatively well preserved. It is 5 m. wide, and its edges are marked by low walls. On both sides of the road are many tombs dating from the fifth century B.C. down to Roman times. There is every reason to believe that by following this road to its end the excavators will reach the Academy itself.

A few miles from Athens along the coast below Phaleron at Hagios Kosmas, probably the Kolias Akra of antiquity, Mr. George Mylonas, one of the younger Greek archaeologists and a graduate student at Johns Hopkins last year, carried out excavations this spring at the very edge of the sea, where he brought to light the remains of habitations belonging to the Early Helladic Period. The earliest, built on the rock, belonged to the very beginning of this period, and they seem to be contemporary with the Early Cycladic Age. The houses, built with stone foundations from 0.60 m. to 0.90 m. thick—upon which presumably rested walls of crude brick—are quadrangular in shape. Above the ruined remains of these earlier structures were found at least four buildings belonging to a later phase of the Early Helladic Period. These are also quadrangular in shape and some are divided by cross walls into two equal compartments. One of these houses contains a hearth of elliptical shape. Characteristic architectural features are the party walls, as at Zygouries, and that the exterior walls curve noticeably inwards. Among the finds from the houses are vases, chiefly sauceboats and cups with in-curving rim; querns, grinders, abundant blades of obsidian, and a figurine of the Cycladic type. The site was abandoned at the close of the Early Helladic Period; it was reoccupied to a slight extent in Late Helladic II, and it became once more an

active settlement in Late Helladic III. A short distance from this hill a cemetery was discovered belonging to the Early Helladic Period. The cemetery is very extensive, containing numerous graves, about twenty of which were cleared. They are generally of a trapezoidal shape and are usually built of slabs. The graves were used for many interments, the average number of skeletons found in each being seven. In four instances a complete skeleton in crouched position was brought to light, evidently the latest burials in their respective tombs. Six perfectly preserved skulls were recovered, which Mr. Mylonas hopes will yield valuable anthropological evidence. In Grave VII eight vases were found, including fragments of two "frying pans"; in the rest of the cemetery, so far as it has been excavated, the funerary offerings were found outside the slabs enclosing the graves. Both in the settlement and in the cemetery, but especially in the latter, so much obsidian was recovered, and evidence of Cycladic influence was so striking (shapes of graves, Cycladic vases, and figurines) that Mr. Mylonas was inclined to believe that Hagio Kosmas had been a port to which obsidian was brought from Melos for working and for distribution in trade with the interior of Central Greece.

Not all the reports of the Greek excavations during 1929 were included in the last number of the News Items. In Achaea Mr. Kyparissis continued his exploration of Mycenaean tombs at Hagio Vasilio of Chalandritsa, where he cleared two rock-cut tombs which formed part of the Mycenaean necropolis. In one of these were found undisturbed four skeletons lying in the usual contracted position with pots of various shapes arranged around them. The second tomb was less well preserved because of a landslip and fall of stones near the entrance. These tombs measured 3.5 m. by 2.5 m., with a height of 1.7 m., and they had dromoi about 4 m. long. Each tomb contained one large amphora and several smaller stirrup-vases and small bowls together with buttons of steatite and terracotta, beads of amber, and a terracotta horse. In the first tomb were found also, near the hand of a skeleton, a double axe of bronze and the blade of a bronze knife. All these objects belong to the latest phase of the Mycenaean Period to judge from the character of the decoration of the pottery. Apart from these two well preserved tombs some others were noted which had unfortunately collapsed. Mr. Kyparissis returned also to the place called Troumbés near Chalandritsa, where at a distance of five minutes walk from the Mycenaean cemetery of Troumbés there is a group of three bee-hive tombs. Of these tombs one had been unofficially excavated a few years ago, but most of the objects from the tomb were recovered in 1929. Mr. Kyparissis investigated primarily the middle one of the group, which had collapsed. This tomb, like the others, is built of flat stones in the well known Mycenaean manner, with each row of superposed stones projecting inwards and thus forming the vaulted roof. The floor of the tomb was divided by two parallel walls and between them was found a great quantity of broken vases. The style of this pottery dates the bee-hive tomb to a period earlier than that of the chamber-tombs. Other Mycenaean cemeteries were noted by Mr. Kyparissis at the village of Mánesi in the Deme of Lapathai and at the village of Mitopolis in the Deme of Pharai. On one of the hillocks of the village of Mitopolis may be distinguished also walls of an acropolis.

At Hagioi Theodoroi in Crete, Mr. Marinatos, the new Ephor of Antiquities for Crete, finished his work of uncovering the Minoan port, and also excavated the so-called Cave of Eileithyia. At the port the whole group of structures along the shore was cleared as well as the rectangular enclosing wall. The evidence of the pottery found here dates these buildings to the period of transition from M. M. III to L. M. I. This harbor deserves attention since it is the only Minoan port yet known, but the exploration of the Cave of Eileithyia deserves even more

particular attention. This cave was cursorily examined thirty-five years ago by Hadjidakis, who concluded from the numerous potsherds found there that it was the Cave of Eileithyia. Mr. Marinatos, after examining other caves in Crete suggested by Professor Martin Nilsson, came to the conclusion that Hadjidakis' surmise was correct, and that the cave at Hagioi Theodoroi was most probably the Cave of Eileithyia. The cave is in a very picturesque spot looking out toward the sea, and before its mouth grows a wild fig tree recalling the Homeric description. A few metres in front of the opening, remnants of an ancient wall indicate that there was once a structure here. Exploration in the cave, carried out with the help of artificial light, produced many objects from the depth of the cave where the deposit was *ca.* 1 m. deep. The area excavated was 3 m. long and 1 to 1.5 m. wide. The fragments of pottery recovered represent all periods from Neolithic down to Roman and even Venetian times. Among the most ancient sherds are numerous examples of the E. M. style of Pyrgos and many Neolithic sherds of mottled vases which prove that the well known E. M. II style of similar vessels from Vasiliki is an inheritance from Neolithic times. About the middle of the cave is a pair of stalactites of unequal thickness which were enclosed by a wall, perhaps of Minoan date. This enclosure indicates that the stalactites were regarded as sacred and that they were the object of a religious cult. This view of the excavator is substantiated by other archaeological evidence coming from Minoan Crete. In the depths of the cave are other stalactites, beneath one of which and a stalagmite there is a chamber of considerable extent, but very low, into which one can enter through a small opening. This appears to have been a kind of adyton, or megaron; it is full of fragments of pottery and it requires further systematic investigation. On the basis of all this evidence the excavator believes that the cave of Hagioi Theodoroi is the famous Cave of Eileithyia mentioned in Homer's *Odyssey*.¹ Strabo also² mentions a sanctuary of Eileithyia at Amnisos. Investigation of the flat ground in the vicinity of the cave revealed remains of buildings near which were found potsherds of Late Minoan and early Geometric types and of one Protocorinthian skyphos. Further exploration is needed here, for Strabo in referring to the "sanctuary" probably does not mean the cave alone, but perhaps a wider precinct.

At Nea Anchialos in Thessaly Professor Sotiriou continued his successful excavations of the Christian monuments of Phthiotic Thebes. In the campaign of 1929 he completed the investigation of the second great basilica which lies beside the high road leading from Volo to Almyros, and he also began the excavation of a third large Church. The completion of the clearing of the second basilica gives us today, in its entirety, the plan of a very early Christian building, which is of paramount importance, not only from the architectural and archaeological, but also from the liturgical point of view. In style this second basilica is like the first basilica at Nea Anchialos, that is, it is of the Hellenistic type divided into three aisles by two rows of eight columns each, and it has at its western end a narthex and an atrium, and on its southern and eastern sides various supplementary structures and a propylon. The atrium was entered from the south through the small propylon. The dimensions of this atrium are smaller than those of the atrium of the first basilica and two rows of columns divide it into three colonnades. In the middle of the atrium there is a well with a marble curb, and opposite this the font of the church was found together with the water-channel supplying it. The floor of the left colonnade of the atrium is paved with large baked bricks. This pavement, according to the testimony of an inscription found near by, belongs to a re-

¹ *Cdyssey*, XX, 186-188.

² X, 476.

pair of the time of the Bishop Elpidios, and the man who paid for the repairs appears to have been Stephanos, "the humble deacon." Elpidios flourished at the beginning of the sixth century A.D. Two doorways lead from the atrium into the narthex, and from the narthex the main part of the church is entered through a central door with three leaves and two lateral double doors. The three-aisled church has its middle aisle twice the width of the side aisles. In some places the original marble pavement is preserved, elsewhere the pavement is of baked brick belonging to the period of the repairs mentioned above. The two rows of columns rest on a high stylobate. The columns were of the Ionizing type, 3.7 m. high, with varying capitals. The absence of the necessary columns and capitals suggest that the basilica did not have galleries. Near the middle of the central aisle was found a base which probably supported a wooden *ambon*. The architectural details of the basilica place it in the fifth century A.D. The most interesting part of the church is the *bema*, all the important features of which were ascertained. This *bema* consists of a series of connected seats for the priests on either side of an isolated throne for the Bishop forming three sides of a rectangle, with the altar in the centre covered by a *ciborium*. On the west this sacred precinct is shut off by a grille. This arrangement of the *bema*, quite different from the arrangement in other related monuments, is significant because it provides monumental testimony bearing on the earliest form of Christian worship. With reference to the immediately adjoining structures, Mr. Sotiriou believes that the tripartite rectangular building to the west of the atrium may be interpreted as the *catechumenum* and the baptistery, while a series of apartments on the south with a hearth may have been the sacristy. The buildings on the east side, from analogy with other sites, may be conjecturally identified as the dwellings of the priests. Mr. Sotiriou also began investigation of a third church, and in the campaign of 1929 found parts of the atrium and the narthex, which were paved with mosaics. To the right of the colonnade of the atrium is an oven about which was found a multitude of plaques of unpurified glass, in various colors, also *tesserae* for mosaics, and colored sand. Probably this was a mosaic workshop. Further work in this region should reveal the whole complex of the court of this third church, which so far as we are able to judge from the architectural fragments found up to the present time, may be attributed to the time of Justinian.

At Nicopolis, Professors G. Sotiriou and A. Orlando continued, in 1929, for the Archaeological Society, its work begun many years ago. After a careful examination of the ruins found within the Byzantine fortification wall of Nicopolis the exploration was restricted to the clearing of a ruined structure approximately in the centre of the Christian city. The excavations determined not only the nature of the building itself, but its relation to other buildings previously discovered by Mr. Philadelphus. An important result of this campaign was the identification of this early Christian monument as a large basilica with a narthex and an atrium and the determination that it formed the centre of a large complex including also those buildings in which was found the inscription of the Bishop Alkison. The whole complex was probably surrounded by a colonnade, remnants of which have been found beside the highway. This new basilica of Nicopolis had a length of 68.9 m. and a width of 31.6 m. After the general plan had been determined the *bema* of the basilica was systematically excavated; the semi-circular apse, having an exterior diameter of 12.4 m., was uncovered, as well as a large part of the *bema* itself. The arrangement of the *bema* is similar to that in the Basilica of Doumetios. The plan of the *bema* is important because it provides evidence for the further development of early Christian worship after its first stage, which was clearly ascertained through the excavations of Professor Sotiriou

at Nea Anchialos. Both the position and the size of this church at Nicopolis indicate that it probably was the Metropolitan Church of the city. In addition to the work on this church Professors Orlando and Sotiriou cleared the *bema* of the basilica of Doumetios and arranged its sculptures. By means of small exploratory trenches they were able to determine the constituent parts of this basilica and thus to draw up a more exact plan of the monument. At the same time they also secured a more complete plan than heretofore available, of the Episcopal Palace to the west of the Basilica of Doumetios.

E. P. B.

BOOK REVIEWS

SOME MODERN SCULPTORS, by *Stanley Casson*. Pp. 119. Full page plates 40. Oxford University Press, 1928. \$2.75.

"My constant reference to ancient Greek sculpture is . . . simply because in ancient Greece, and nowhere else to the same degree, sculpture in stone was an integral part of the artistic life of the people and never a mere artistic luxury." Such is the acknowledgment made by the author in his preface.

Chapter II illustrates and comments upon Rodin and his pupils, Barye "the pioneer," Maillol and Bourdelle and Hellenists. "A new Movement in Sculpture" (Ch. III) is exemplified by works of Městrovic and Rosandić. The two independents, Eric Gill and Gaudier-Brzeska, are the subject of the fourth chapter; the fifth and last chapter is given over to "Epstein and Dramatic Sculpture."

Mixed with a considerable degree of interpretative f'air and wordy subjectivism, there is in this book an interesting blend of ingenuous intuition and factual inepitude. The author begins with words that would awaken the admiration of a traditionalist, but as one waits for nice points of comparison with well-known pieces of ancient sculpture, one waits in vain.

Casson makes a neat point in contrasting the surface values of Pentelic and Parian marbles with the dead-white Carrara. It is interesting also to know that Městrovic revived the use of the yellowish stone of Brač off the Dalmatian coast near Spalato, and that Gill popularized one of the two English marbles, the Hoptonwood stone. He also throws a useful stone at the bad modern practice of patinating bronze by chemical processes. He strikes a shrewd blow at artistic ingenuity, incongruity, and malperception when he says: "It is simple ignorance that encourages our commercial sculptors to carve their uneasy masterpieces. They have, I imagine, never seen a fine Byzantine relief or a gem of Greek archaic art. Why, after all, should they have seen them? Are they not educated in the dim art schools or architects' offices where the repertoire of antiquity is usually limited to a 'Dying Gladiator' in plaster and a slab of the Parthenon frieze grime-covered and faded?"

The author's manner of presentation makes it fairly possible to epitomize his views in a few of his own pithy statements. Barye thought only in terms of life and movement and sculptural forms. Rodin memorized from observation and created a synthesis of his stored memories, but in most cases his works give the observer an inexplicable sense of discomfort. Maillol and Bourdelle were pupils of Rodin. Casson thinks Bourdelle's "Hercules the archer" in the Luxembourg "one of the most inventive and satisfactory sculptures of today." It has power and fine musculature, but little grace. The "Vierge d'Alsace" is truly a noble figure. Maillol is Hellenic, the author states, "if Hellenism implies the absence of prejudices rather than the presence of a theory." I find a certain Greek serenity in the statues of Maillol, but life seems not to be inherent in them.

Městrovic and Rosandić are the protagonists of a "new movement in sculpture." The former produces works that give us "almost the apotheosis of the barbarian"; the latter brings out in his works the indefatigable energy of the Southern Slav artists by a certain power and firmness of treatment. Both these sculptors produced as their masterpieces, mausolea: Městrovic one to the Croatian family of Racić which stands on a promontory at Ragusa Vecchia; that by Rosandić by the island of Brač.

The author inclines to like Eric Gill, but finds his skill ruined by his temperamental religiosity, a blend of "pure Roman Catholicism and Guild Socialism." His fine feeling, however, for the decorative values of the human form enabled

him to do several excellent pieces. The torso, "Mankind," in Hoptonwood stone, the archaic mask, "Susan," and his "Dancer," have beauty and charm.

The author has a hard time in showing his dislike for Epstein. He quotes the quite terrible remarks that have been made by others, comments on the provocative attitude of original artists, and on the traditional complacency of the routine public, but finally brands Epstein as a sculptor, who, like Rodin, gives a mud-pie finish to his work, and agrees with Roger Fry: "Is he a master of sculpture? Alas, I am bound to say no. If I examine my own sensations and emotions I am bound to confess that they seem to be of quite a different nature when I look at good sculpture from those I feel in front of Mr. Epstein's bronzes. There is an undoubted pleasure in seeing any work accomplished with such confidence and assurance, such certainty and precision of touch: there is a powerful stimulus in the presence of such vividly dramatized personalities but the peculiar emotions which great sculpture gives seem to me quite different. . . . These busts are for me brilliant but rather crude representations in the round. If these are sculpture then I want another word for what M. Maillol and Mr. Dobson practise, let alone Luca della Robbia and the Sumerians."

RALPH VAN DEMAN MAGOFFIN

NEW YORK UNIVERSITY

MACHU PICCHU, A CITADEL OF THE INCAS, by Hiram Bingham. Pp. xiii+244 with 218 illustrations and one map. Published for the National Geographic Society by the Yale University Press, 1930. Limited edition of 500 copies. \$50.

This is the definitive report of the explorations and excavations made in 1911, 1912 and 1915 at Machu Picchu under the auspices of Yale University and the National Geographic Society. The story of the discovery of the ruins of Machu Picchu was published in 1922 in *Inca Land*.

"The Incas left no written records, no hieroglyphics, and few rock carvings." Here, therefore, is the opportunity for a veritable archaeological tour-de-force, inasmuch as the records of the past must be read in the monumental evidence. Machu Picchu is in "the most inaccessible corner of the most inaccessible section of the central Andes." This accounts for the excellent condition in which the ancient monuments are found under centuries of vegetable mold and tangled brush and trees.

The nine chapters of the book contain, in a well-considered order, the exploration and excavation of the site, the search for Inca roads that led thereto, the city and sacred plaza plan, the architecture, burial caves, pottery, metallurgy, tokens, tools and utensils of stone, bone, and wood, and a final historical chapter on the builders of Machu Picchu. The site is on a sharp peak more than 10,000 feet above sea level, and seemingly has remained unknown and practically unvisited.

The first two chapters contain simply an interesting narrative. Scientific comment begins with the description of the Sacred Plaza and Snake Rock. Of the more than one hundred stone stairways discovered, that leading from Intihuatana hill down to the house of the priest on the sacred plaza is the best, each step being a single block of granite. The stones are laid in walls in a thin quadrate fashion with carefully broken joints, and there is one group of structures which has been named the "Ingenuity Group" which offers many novel features of building. A piece of the wall at the northwest corner is probably the most beautiful piece of ancient stone work in America. Many stones are cut so that they interlock with a stone in the course next above so that mortar was unnecessary to hold the ashlar firmly together. The burial caves offer little of novelty.

The pottery has simple lines and many pieces are quite Greek in type. All appear to have been hand-made, although the author believes a primitive potter's wheel was used in the manufacture of a large part of them. The aryballus shape is the most common of all, comprising 28 per cent of the total found. The designs are nearly all conventional and geometric. The beaker-shaped olla with embossed ornamentation, which was used as a cooking pot, is also found in considerable numbers. Four times as much pottery was found inside the town as in the burial caves outside. The pottery, with few exceptions, is purely Inca both in design and workmanship. This chapter is the most valuable one in the book.

The metal work shows that Incas were "acute metallurgists." Their knowledge of proportion in fusing bronze, depending upon whether the objects were to be hammered or cast, is indicative of a high state of metallurgical skill. The author identifies the older part of Machu Picchu with the Tampu-tocco mentioned several times in sixteenth century writers, and believes that it was built by the Amautas a thousand years or so before the Incas took it over. In fact he calls it the "cradle of the Incas." We are left with only a tentative date for its earliest foundation.

All in all, *Machu Picchu* is a very satisfactory publication.

RALPH VAN DEMAN MAGOFFIN

NEW YORK UNIVERSITY

THE CIVILIZATION OF GREECE IN THE BRONZE AGE, by H. R. Hall. Pp. xxxii + 293; 370 illustrations, chronological table, two maps. Methuen & Co., London, 1928.

The Rhind Lectures of 1923 at the University of Edinburgh, enlarged and brought up to date, are the subject matter of this book by the Keeper of Egyptian and Assyrian Antiquities in the British Museum. Hall has several books and many journal articles to his credit, and he writes with the authority to which his personal knowledge of the eastern Mediterranean, backed by his wide Egyptian and Mesopotamian learning, entitles him.

As do many of the elect, Hall also sets forth first why he does not adopt certain nomenclature. "Helladic" he will use for the earlier phase of the Bronze Age culture of Greece proper, but prefers "Mycenaean" for the later phase. He sets, however, as one of his dicta that "civilization without art was not civilization," which tends to temper certain of his archaeological obstinacies. Few, probably, will be unwilling to acknowledge that the present necessity of writing "the art of the mainland in the Early and Middle Mycenaean periods (Myc. I-II, the L. H. I-II of Wace=L. M. I-II)," etc., and "In Rhodes we find the pottery of Ialyssos, contemporary with that of Amarna, and Cyprus in the first half of the fourteenth century, of the same mainland Mycenaean style, which gradually varies from the Cretan, and in no way as the Cretan formerly differed from the various pre-Minoan styles in Greece, Thessalian, Danubian, *Urfirnis*, Minyan, and *Maltmalerei* style alone. Late Mycenaean ware, properly so-called, is distinguishable from Cretan L. M. IIIa" is unnecessarily technical, and most people will welcome the appearance of a more standardized terminology.

Mr. Hall seems, however, to prove, by his wealth of comparative ceramics, armor, painting, epigraphy, and toponomy, that Crete was the flower of Mediterranean civilization, that her colonists and military expeditions spread the seed of Mycenaean culture, and that her artists and artisans are entitled to the credit of the aesthetic side of the later fusion of Pelasgi, Wiros, Indo-Europeans, and Minoan-Mycenaeans which we call Hellas and the Hellenes. The innovation of chalcolithic days before 3000 B.C. of the varnish painting (mislabelled glaze) on pottery, which reached its acme in Greek technique, belongs to Crete. The influence of

both Egypt and Sumeria-Babylonia via the Anatolian coast cities on Crete is given full—some Hellenists will think overfull—credit. The fact that the silver of the ancient east came mostly from Anatolia, and much gold from Pactolus, is duly emphasized. The cross references found in tombs and hieroglyphics in Egypt and on the painted walls of Cretan palaces, on scarabs and on seals are appraised in masterly fashion. The various motives that appear on figurines, on vases, on gems, on objects of metal, are traced through their intricacies of development in a way which to any but the initiate must seem almost marvellous, as witness (pp. 59–60) the change of the spiral coil decoration, transferred from its proper place as gold wirework or pottery ornament to stone surfaces, and the quest of its origin back to Anatolia and ultimately to the Caucasus and to Elamite-Sumerian developers. Hall mentions, among other things, that the *étui* of gold *appliqués* wirework found at Ur in 1927, dating at least as far back as 3000 B.C., is the oldest true spiral thus far known.

The author's fourth chapter (or lecture), which covers the period 1800–1500 B.C. (M. M. III and L. M. I), is the high point in his book. His handling of the frescoes, the pottery and its polychrome decoration, the seals, the figurines, and the weapons, leaves little to be desired. He traces in a fascinating way the degeneration of the "ubiquitous Bügelkanne or false-necked or 'stirrup' vase." He shows beyond much doubt that the Keftiu were the old Minoan Cretans, and that the "Peoples of the Sea" were Anatolian coast and Aegean island rovers and pirates—then as later—driven out by the onsets of central European invaders who drove the earlier inhabitants of Anatolia southward, and those of continental Greece across the sea eastward.

Hall's hardest blows at some of his confreres strike on their claim that the Cretan Minoans and Mycenaeans spoke Greek, even as far back as neolithic times. He will have none—or little—of it, and he seems easily to have the better of it. His Mycenaeans are "minoized Pelasgi, Mediterranean by race and culture, with probably a slight admixture of Achaian (Indo-European) blood, not true Achaians at all and so not, in all probability, Greek speakers."

One may question whether the author's belief that a people would change suddenly from being an inhuming to becoming a cremating people will gain much support, and one could wish that he did not use "Aryan" interchangeably with "Indo-European": a usage that has been given up for twenty years or so. In an appendix (pp. 287–291) Hall gives, under the title, "On the racial affinities of the inhabitants of Greece in the Bronze Age," the most succinct, convincing, and enlightening statement available in any language. His book all through is basically sound, archaeologically meticulous, and convincingly erudite.

RALPH VAN DEMAN MAGOFFIN

NEW YORK UNIVERSITY

THE EXCAVATIONS AT DURA-EUROPOS, conducted by Yale University and the French Academy of Inscriptions and Letters. Preliminary Report of First Season of Work, Spring 1928. Edited by P. V. C. Baur and M. I. Rostovtzeff. Pp. X, 77. Yale University Press, New Haven. 1929. \$1.00.

This is a report of the first campaign of excavation at Dura-Europos published after the second campaign, which has also yielded interesting results on which Professor Clark Hopkins and Mr. Jotham Johnson reported at the Christmas meeting of the Archaeological Institute in Boston. Professor Breasted had already published some important paintings from Dura (*Oriental Forerunners of Byzantine Painting*, 1924) and in 1926 appeared Professor Cumont's *Fouilles de Doura-Europos*, 1922–1923. The work was continued in 1928 for less than a

month, from April 13 to May 6 (p. 2 May 6, p. 11 May 10) under M. Pillet as field director with the assistance of Professors Rostovtzeff and Cumont. In 1929 there was a longer campaign, with the assistance of Professor Clark Hopkins, whose first field experience with us at Olynthus well prepared him, since Dura was founded from Macedonia and shows in the houses much Macedonian influence. Although Pillet and the French Academy of Inscriptions and Letters are in charge, the money has been furnished by a grant from the General Educational Board. Yale has already felt "the stimulating effect of the undertaking upon the entire area of humanistic studies," as President Angell says in the preface.

Director Pillet writes the General Report on the Gates and Roads, Fortifications, the Inner Redoubt, the Citadel. Professor Rostovtzeff publishes the Greek and Latin Inscriptions (mostly proper names, dating from 65 to 262 A.D. but some throwing light on Roman rule in Dura down to its destruction at the end of the third century and on the Roman army in Syria). Professor Torrey publishes Two Palmyrene Votive Inscriptions (one a dedication to Nemesis); Professor Cumont, The Relief of Nemesis (on which the Sun is associated with vengeance); Mr. Koechlin, A fragment of Mussulman Pottery (white with decoration, found also at Suss but invented in China). Professor Baur publishes A Relief of Hercules, an inferior work assigned to the end of the second century A.D. The type is like that on coins of Commodus who was often represented as Hercules. The dating may possibly be correct but it is fanciful to suggest that an admirer of Commodus worshipped Hercules Commodianus in his home. There is considerable repetition and some inconsistency in measurements and statements throughout the report by the different collaborators. So for example the relief of Hercules is said by Director Pillet on p. 24 to have been offered (for sale) at Salihiyeh by workmen who had concealed and stolen it, and its place of discovery to be unknown but on p. 75 Professor Baur says it was let into the wall of a house abutting on the west wall of the so-called Interior Redoubt. It is peculiar to read (p. 64) that Professor Torrey does not know how his own colleague Professor Rostovtzeff may have interpreted the inscription from the Hauran. The monumental Palmyrene Gate with three doorways, one behind the other, and two rooms inside the towers, the walls of one covered with inscriptions, is important. The houses and graves, so far excavated, give promise of good things to come. We hope that we shall soon have a report of the longer second campaign and that the results of the third year will be as successful.

DAVID M. ROBINSON

JOHNS HOPKINS UNIVERSITY

GREEK AND ROMAN BRONZES, by Winifred Lamb. Pp. xxiii + 261. Ninety-six plates and thirty-seven illustrations in the text. Lincoln Macveagh, The Dial Press, New York, 1929. \$7.50.

Works in bronze are conspicuously beautiful among the products of classical antiquity that have been preserved. The technique of casting conveys so accurately the artist's expression, and the weathering of time so delicately complements with patination the original surface of the metal that a Greek bronze is almost invariably a masterpiece of line and tone. Miss Lamb is specially qualified to write on this subject because of her study of the bronzes found at Sparta in the excavations conducted there by the British School.

The present book is one of a series dealing with archaeological subjects that is called "The Illustrated Library of Archaeology," and is edited by A. B. Cook. Although it bears the imprint of an American press it is printed in Great Britain at

the University Press of Aberdeen. The proof reading has not been carefully done and many typographical errors have been overlooked. The plates are numbered with Roman numerals but references to them in the text are by Arabic numbers. The illustrations in the text are not numbered consecutively throughout the book but are renumbered for each chapter. This method leads to confusion in locating references and has no appreciable advantages.

The material treated in the book includes decorative bronzes and figures less than one metre high. No explanation is given for the exclusion from a study of Greek and Roman bronzes of the comparatively small number of bronze statues that have been preserved. Other important material has also been omitted, such as the fine statuette of a horse in the Metropolitan Museum. The book, therefore, offers only a restricted selection of the objects available, but the selections are well illustrated on ninety-six half-tone plates.

The subject is presented chronologically beginning with the prehistoric period, and within each period statuettes and decorative works such as applied reliefs, relief work on panels, weapons, etc., are separately discussed. Where knowledge of the sources of the objects is available an attempt is made to localize styles in certain centres of production, but information as to provenance, on the whole, is too scanty to permit the establishment of many acceptable criteria of style. Literary references, however, suggest differences of composition of the bronze made in different cities, and additional evidence as to origins might be secured by the chemical analysis of bronze fragments where they are available.

This book will be useful to the young archaeological student and to the intelligent layman, but because of its limited content it is in no sense a work of reference.

T. L. SHEAR

PRINCETON UNIVERSITY

DIE BRONZESCHNABELKANNEN: EIN BEITRAG ZUR GESCHICHTE DES VORRÖMISCHEN IMPORTS NÖRDLICH DER ALPEN, by Paul Jacobsthal and Alexander Langsdorff. Pp. 103, 42 plates. Heinrich Keller, Berlin-Wilmersdorf, 1929. 62 M.

This is an interesting classification and study of bronze pitchers, beautifully illustrated and provided with a good map to show the distribution of the types in Europe. Much light is thrown on trade-relations between south and north in the sixth and fifth centuries B.C. and on the pre-Roman imports from Italy into the lands north of the Alps. But perhaps the most important part of the book is the investigation of the Italian bronze industry. Langsdorff, in the first part of the book, tabulates the grave-finds from Italy, Switzerland, Germany and Austria and Jacobsthal draws the historical conclusions in the second part. He studies the forms of the vases, the attachments (palmettes, spirals, snakes, etc.), the decoration, plastic and incised, and the special types. In an appendix, Langsdorff discusses the unpublished finds from South Switzerland which are in Berlin and Braunschweig.

There is no use made of material in America and England; there is no mention of several important examples of such bronze pitchers in the Metropolitan Museum. Neither Miss Richter's *Catalogue of Bronzes in the Metropolitan Museum* nor Walter's *Catalogue of Bronzes in the British Museum*, are even cited, and even Beazley is so little known that his name appears as Beazly. But the book is a useful one for references and should be in libraries devoted to art and archaeology. It is not a book which will be much read. One who wants a handbook will turn to Miss Winifred Lamb's new book on *Greek and Roman Bronzes* (1929).

DAVID M. ROBINSON

JOHNS HOPKINS UNIVERSITY

DRAWINGS BY PISANELLO: A SELECTION WITH INTRODUCTION AND NOTES, by George F. Hill, in folio, Paris and Brussels: Les Editions G. van Oest, 1929.

The learned keeper of coins and medals in the British Museum, author of important studies on Pisanello, medallist, was the obvious editor for this work, and he has acquitted himself well of a difficult task. The album of 378 sheets which Vallardi sold to the Louvre as by Leonardo da Vinci has had a strange fate for a very famous book. It has been frequently renumbered, frequently cited, with the result that it is very difficult to follow up any reference to particular drawings. Qualitatively, at least, a third of the drawings are not by Pisanello, and a number that are by him are coarsely reworked by later hands and valueless. In the years before the war, the French Society for the Reproduction of Drawings by Masters undertook the publication of the entire series, and in four portfolios got as far as 288 sheets. Then came the war, and the abandonment of the project.

In the matter of citation, Mr. Hill provides a concordance of previous lists and numberings, by which any reference may readily be carried back to the drawing intended. One is grateful for this convenience and for the good sense and good will that provides it. The real task, however, was to select material for sixty-two large plates, including some seventy-five separate subjects. It was a question of choosing what was in good condition, representative and by the master. This anthology presents a blend of great power with a roving fancy, that is rare enough among artists. It makes for critical modesty to think of the estimate that would be made of Pisanello had we only the grand medals and the handful of pictures. The drawings in this book are extraordinarily various, some for frescoes and panels, others for medals, many correlated to pictures. Most extraordinary is the series of animal studies, and here most remarkable, the series devoted to the muzzle of a horse and conducted with an amazing tenacity.

The editor's introduction is characteristically complete containing additions to the life and works of Pisanello that are not yet in the books of reference. The notes on the drawings are suggestive and such as only long acquaintance can inspire. One rarely finds so harmonious a coöperation of taste, erudition and good sense as this book represents.

FRANK J. MATHER

PRINCETON UNIVERSITY

A CONTRIBUTION TO THE STUDY OF PREHISTORIC MAN IN ALGERIA, NORTH AFRICA, by Alonzo W. Pond, in Logan Museum Bulletin, Vol. I, No. II (77 pages, 3 text illustrations, 13 plates; bibliography pp. 74-77). With supplementary papers by Alfred A. Romer (pp. 79-163) and Fay-Cooper Cole (pp. 165-189). Beloit College, Beloit, Wisc., 1928.

Pond's contribution is an account of excavations in the Mechta el Arbi escargotiere mound, conducted by the Logan Museum of Beloit College late in 1926. The site is located about 50 km. west of Constantine, Algeria.

Escargotieres are prehistoric deposits containing quantities of snail shells. Their geographic distribution extends north of the Sahara, from Tunisia to Morocco. In general form these deposits compare with the Danish kitchenmounds and our shell heaps. Though occasionally found in caves, they are primarily open plain deposits. Thus far no stratification has been observed in the escargotieres. Each mound, as far as known, contains a single culture throughout. Occasionally human interments are found in these snail-shell mounds. The cultures observed in the various deposits range from Upper Palaeolithic (of North African type) to Neolithic levels.

The Mechta el Arbi site yielded the vestiges of an Upper Palaeolithic occupation. Basing his interpretation upon the lithic contents, the author arrives at the conclusion that the culture belongs to the Middle Aurignacian horizon, with certain survivals of the Lower and strong suggestions of the Upper Aurignacian elements. Pond's accurate description of the artifacts and his good plates clearly illustrate his interesting conclusion. The tables of the recovered material are a good feature of the publication.

In the supplementary paper of Alfred A. Romer on "Pleistocene mammals in Algeria" (Fauna of the Palaeolithic station of Mechta el Arbi), the bibliography (pp. 138-142) and the fauna tables (pp. 144-163) are particularly noteworthy. In Fay-Cooper Cole's paper on "Skeletal material from Mechta el Arbi" the reviewer felt the lack of detailed description of the modes of burials, orientation of skeletons and the dimensions of graves.

It is to be hoped that the Logan Museum will continue its work in this important part of Africa.

VLADIMIR J. FEWKES

UNIVERSITY OF PENNSYLVANIA

IMPERIAL ROMAN SPAIN: THE OBJECTS OF TRADE, by Louis C. West. Basil Blackwell. Oxford, 1929. 5 net.

This is a study of ninety-two pages whose fifteen chapters and fifteen tables contain masses of fact regarding the various products of Roman Spain, its merchants and traders, its imports and exports, its general development and means of communication, and its citizens living abroad. The book is of much value to the student of the Roman Empire in its economic aspect, and has considerable interest also for the nonscholastic reader.

GRANT SHOWERMAN

UNIVERSITY OF WISCONSIN

NEW GUIDE TO POMPEII, by Wilhelm Engelmann. Second Revised Edition. Wilhelm Engelmann, Publisher. 1929. 18L.

The New Engelmann Guide is tastefully printed on good paper, bound in red cloth with black lettering, contains 141 figures and a new map, and is of convenient size. The Ephebe figures as frontispiece, and augurs well for the newness of the content, which includes an account of the new excavations finally thrown open to the public two years ago, good illustrations of the Villa of Mysteries, and the chief results of Matteo della Corte's long continued and able studies.

GRANT SHOWERMAN

UNIVERSITY OF WISCONSIN